

METHAMPHETAMINE ABUSE

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THURSDAY, APRIL 21, 2005

U.S. SENATE,
SUBCOMMITTEE ON LABOR, HEALTH AND HUMAN
SERVICES, EDUCATION, AND RELATED AGENCIES,
COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:33 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Tom Harkin presiding.
Present: Senators Harkin and Reid.

OPENING STATEMENT OF SENATOR TOM HARKIN

Senator HARKIN. The hearing of the Labor, Health and Human Services Appropriations Subcommittee will now come to order. Our topic this morning is methamphetamine abuse, but before I read my opening statement I first just want to again publicly thank the chairman of this subcommittee, Senator Arlen Specter of Pennsylvania, for the great working relationship that we have always had. As he has pointed out, this gavel has changed back and forth four or five times since we have been on the subcommittee, and it always has, to use his words, been a seamless transfer of the gavel.

I think it is a mark of his great leadership that he allows me to chair a hearing here on methamphetamine or other things that I ask to chair hearings on. Likewise, when I was chairman I allowed him to have hearings, as I did for people when I chaired the Agriculture Committee. I think that is really the way the Senate ought to operate. These are nonpartisan issues that we are talking about here, and we are very busy people. Sometimes I have the interest in a certain area or the time to do something and then sometimes Senator Specter has the interest and the time and I do not. So this is a way in which we I think are better able to collect the kind of information and data that we need to make informed decisions.

So I wanted to publicly again thank my chairman and my friend Senator Specter for allowing us to have this hearing.

As I said, our topic this morning is methamphetamine abuse. I am sad to say this, but my home State has been hit particularly hard by this epidemic. Iowa ranks fourth among all States in the percentage of residents who are admitted to treatment centers because of meth. That is not a statistic that we are happy about.

Fortunately, Iowa is responding. The State recently passed the toughest law in the Nation for limiting consumer access to pseudoephedrine, one of the key ingredients for making meth. Thanks to grants from SAMHSA, the Iowa Department of Public Health is pioneering innovative strategies for preventing and treat-

ing meth abuse. Des Moines is one of five sites participating in NIDA's methamphetamine clinical trials group, studying the use of medication and group therapy in meth treatment.

But Iowa is not alone in struggling with meth abuse. There are 16 States that now have higher treatment admission rates for meth than for cocaine and heroin. Recently we have heard disturbing reports that meth is moving to big cities on the East Coast, where the drug has been linked to the spread of HIV.

Certainly law enforcement has a critical role to play in curbing meth abuse. I strongly support efforts to crack down on the people who are making and selling this drug. But even if we shut down every home-based lab and threw every dealer into jail, we would still have a meth problem in this country. It will not go away until we do a better job of preventing people from using meth in the first place and giving addicts the treatment they need to kick the habit for good.

That is where this hearing comes in. SAMHSA and NIDA, two agencies funded in our bill, are our most important Federal resources for preventing meth abuse. We have to make sure they get the appropriation levels they need to address the problem. Meth is destroying lives, filling our prisons, and taking mothers away from their children, and we need to stop this epidemic now.

We are fortunate to have an outstanding panel of witnesses to discuss this issue with us this morning, and I will introduce them all shortly after I recognize our distinguished leader here. But I want to offer a special welcome to Vicki Sickels from Des Moines, who will give us a firsthand account of what it is like to struggle with an addiction to meth. So, Vicki, I want to publicly again thank you for taking time to come here today and tell your story. You are really what this hearing is all about.

With that, I will turn to my good friend and our distinguished leader on our side, Senator Reid from Nevada.

OPENING STATEMENT OF SENATOR HARRY REID

Senator REID. Senator Harkin, thank you. Thank you very much.

There is so much ill will and partisanship in this body that I am obligated to say how fortunate we are to have two people work as closely together as you and Arlen Specter. I want everyone in this audience and on this panel to understand what a rare situation we have here. Senator Harkin is the ranking member. He is not the Chair of this subcommittee. But he and Senator Specter have been Chair and ranking member as the majority goes back and forth in this body and they consider each other equals. Here, in spite of all the partisanship in this body, Senator Harkin is conducting this hearing. I think it speaks so well of you and Senator Specter.

Senator HARKIN. Thank you.

Senator REID. I do appreciate your holding this hearing. I would ask that my full statement be made part of the record.

Senator HARKIN. Without objection.

Senator REID. I had the opportunity a month or so ago to meet with representatives from the Drug Enforcement Administration out of Los Angeles and from a 7 task force they have in Las Vegas that deals with drug interdiction. The whole purpose of this meeting was to talk about methamphetamines. The story was like a

dime store novel, how manufacturers in Nevada have been driven south of the border into Mexico and the lengths they go to to bring the product to Nevada and throughout parts of this country. The same containers that are hidden in these vehicles that they bring the stuff to America in, they use to take back bundles of cash. They have them hidden in various places in the vehicles and loaded with money.

We have a tremendous problem in Nevada—28.6 percent of the male arrestees in the city of Las Vegas have methamphetamines in their blood when tested, 28.6 percent of the men arrested. As you know, kids are now using methamphetamine too. About 12.5 percent of high school students in Nevada, claim they have used methamphetamines. Those are the kids that admit it. Think how many do not.

Southern Nevada has been designated a high-density drug traffic area since 2001. This administration is eliminating that program. Tom, it is just a shame, just a shame.

The true war on drugs takes more than dedicated law enforcement, though. It takes parents and teachers, counselors working to teach kids that drugs like methamphetamine are killers. My staff briefed me about what it does to the brain. We are fortunate that we have a very good treatment facility in Nevada and I appreciate very much your allowing Mr. Steinberg to come and testify. WestCare does a great job.

PREPARED STATEMENT

Methamphetamine is a threat to the health and safety of our families and communities, and I want to say, Tom, that I am going to study the testimony of Ms. Sickels, because she is the courageous one to come here and hold herself up, by some, to ridicule for having been so weak. But the fact of the matter is you are very strong or you would not be here, and I admire and appreciate your coming before the Congress to tell your story, because by telling your story other people will not have to go through the hell that you have been through.

Senator Harkin, I hope you will excuse me.

Senator HARKIN. Thank you very much, Senator Reid. Thank you for gracing us with your presence. Your statement will be made a part of the record in its entirety.

[The statement follows:]

PREPARED STATEMENT OF SENATOR HARRY REID

I want to thank Senator Harkin for scheduling this hearing and for his continued efforts on methamphetamine abuse. I also want to thank our distinguished guests for sharing their expertise about methamphetamine abuse and for their recommendations about how we can improve prevention and treatment efforts.

Many Americans believe the war on drugs is something that is only taking place in our cities, on our borders, and in the jungles of South America. The truth is methamphetamine abuse is everywhere, but its effects are felt particularly hard in largely rural states like Nevada and Iowa. It is made in clandestine labs in small town America or smuggled in from Mexico and Canada. It's readily available, cheap and is abused by people of all races, economic, and social backgrounds.

According to the Nevada Department of Education, over 12.5 percent of Nevada's high school students have used methamphetamine. In 2004, 40 percent of individuals admitted into treatment programs funded by the Nevada Bureau of Alcohol and Drug Abuse had used methamphetamine, and approximately 5,000 Nevadans received treatment for meth addiction. I have been told that the estimated number

of meth users who have not received treatment may be eight times that amount—that's 40,000 Nevadans!

To tackle a problem of this size and voracity, we have to approach it from every angle—law enforcement, prevention and treatment. The President's budget for fiscal year 2006 cuts the High Intensity Drug Trafficking Area program (HIDTA) funding by 56 percent. This funding must not be cut. The HIDTAs work to reduce drug-trafficking and production in designated areas in the United States by facilitating cooperation among all levels of drug enforcement, and enhancing the intelligence sharing among these agencies. I have helped create task forces throughout the state of Nevada, and I also secured the funding for the creation of the Nevada HIDTA in 2001. I will fight to see this program is not eliminated.

I will continue to fight so that law enforcement efforts can continue to shut down methamphetamine labs and prevent trafficking and dealing, but it is equally important to focus on prevention and treatment programs. The true war on drugs takes more than dedicated law enforcement; it takes parents and teachers and counselors working to teach kids that drugs like methamphetamine are killers.

We also have to reach those who are already addicted to methamphetamine. This includes those in the prison system. If we don't treat people who are in jail for crimes associated with their addiction, then when they get out they are more likely to commit those same crimes again. Drug counseling and support prevents recidivism of drug related crimes.

Addiction is not merely a matter of will. It is a medical problem that has all the properties of a disease. For that reason, we have to treat it the same way we treat the spread of a horrible disease—through both prevention and treatment. To do this well, we need to understand how people become addicted, what research tells us about methamphetamine affect on the brain, what someone goes through when coming off the drug and how to integrate former addicts into society.

I am so pleased that Dick Steinberg from the WestCare Foundation in Las Vegas is testifying before the Committee today. He is doing a wonderful job of reaching out to those who are addicted to methamphetamine. Under his tenure as President and CEO of WestCare, the company has grown from a small treatment center in Las Vegas, into one of the largest nonprofit substance abuse treatment organizations in the United States. I look forward to hearing more about their efforts in Nevada.

Methamphetamine is a threat to the health and safety of our families and communities. I look forward to hearing from our witnesses about how we may best direct resources to address this problem—in Nevada, in Iowa, and across the Nation.

STATEMENT OF CHARLES G. CURIE, ADMINISTRATOR, SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION (SAMHSA), DEPARTMENT OF HEALTH AND HUMAN SERVICES

Senator HARKIN. We will turn now to our witnesses. I will just go from my left to right. First will be Mr. Charlie Curie, the Administrator of the Substance Abuse and Mental Health Services Administration, which we call "SAMHSA" for short. That is the Federal agency responsible for improving the Nation's substance abuse prevention, addictions treatment, mental health services.

Mr. Curie has over 25 years of professional experience in mental health and substance abuse service. Prior to his confirmation as SAMHSA Administrator, Mr. Curie was the Deputy Secretary for Mental Health and Substance Abuse Services for the Department of Public Welfare in Pennsylvania. A graduate of Huntington College, he holds a master's degree from the University of Chicago School of Social Service Administration.

Mr. Curie, welcome. As I will say to all of you, your statements will be made a part of the record in their entirety. In the interest of time, if you could just sum up perhaps and make the major points of what you would like to say, I would sure appreciate it. Thank you, Mr. Curie.

Mr. CURIE. Thank you, Mr. Chairman, and I appreciate the opportunity to present information today and for you to hold this hearing so that we can look at approaches to stem the tide of meth-

amphetamine abuse in America. It is also a privilege for me to be here today with my good friend and colleague Nora Volkow from NIDA. We work very closely together and I think the world of her. Also it is a pleasure to be with Dick Steinberg, who is, as has been indicated, an excellent provider. I have known him for many years. It was especially a privilege this morning to meet Vicki Sickels because, as Senator Reid indicated, I think she is the most important person sitting here with us this morning as an individual that shows treatment works and recovery is real.

It is abundantly clear that many of our most pressing public health, public safety, and human services needs have a direct link to substance abuse. This obvious link is why this administration places such a great importance on increasing the Nation's public health approach to prevention and increasing the Nation's substance abuse treatment capacity.

Over the past 4 years we have worked hard to align SAMHSA's resources to create systemic change in our approach to preventing substance abuse and treating addiction. Our everyday work at SAMHSA is structured around our vision of a life in the community for everyone and our mission of building resilience and facilitating recovery. In partnership with our other Federal agencies, States, and local communities, consumers, families, providers, and faith-based organizations, we are working to ensure that 22 million Americans with a serious substance abuse problem have the opportunity for recovery, to live, work, learn and enjoy healthy and productive lives.

Under the leadership of President Bush and with the support of Secretary Mike Leavitt in Health and Human Services and the Office of National Drug Control Policy Director John Walters, we have embarked on a strategy that is working by focusing attention, energy, and resources as a Nation, and we have made some real progress.

The most recent data confirms that we are steadily accomplishing the President's goal to reduce teen drug use overall by 25 percent in 5 years. Now at the 3-year mark, we have seen a 17 percent reduction and there are now 600,000 fewer teens using drugs than there were in 2001. This is an indication that our partnerships and the work of prevention professionals, schools, parents, teachers, law enforcement, religious leaders, and local community anti-drug coalitions is paying off.

We know when we push against the drug problem it recedes. Fortunately, we know more today about what works in prevention and treatment than ever before. We also know our work is far from over. In particular, we continue to be very concerned about methamphetamine abuse. It is an extremely serious problem. Its use and in part its popularity can be explained by the drug's availability, ease of production, low cost, and its highly addictive nature.

Over the years we have initiated a number of grants, technical assistance and training activities at SAMHSA to specifically target the prevention and treatment of methamphetamine addiction. These are detailed in my written testimony. These past investments continue to inform our current strategy and have made significant contributions toward our current efforts.

In particular, I want to bring your attention to our Access to Recovery Program and our Strategic Prevention Framework. Access to Recovery, proposed by President Bush, is a new consumer-driven approach for obtaining treatment and sustaining recovery through a State-run voucher program. State interest in Access to Recovery was overwhelming. 66 States, territories, and tribal organizations applied for the \$100 million in grants in 2004. We funded 14 States and one tribal organization in August 2004. I might mention that Tennessee and Wyoming, two of the States, have a particular focus on methamphetamine.

Because the need for treatment is great, as the demonstrated methamphetamine rates alone have demonstrated and as you shared, Senator, earlier, President Bush has proposed increasing funding for fiscal year 2006 Access to Recovery, for a total of \$150 million. The use of vouchers coupled with State flexibility offers an unparalleled opportunity to assure treatment resources are being used to address current treatment needs. In other words, States that are seeing the increase in methamphetamine can gear their voucher program to address just that issue and be able to tailor their approach based on the needs in their State.

At the same time, we are doing more to prevent drug use before it begins. To align and focus our prevention resources, SAMHSA awarded Strategic Prevention Framework grants to 19 States and 2 territories to advance community-based programs for substance abuse prevention. These grantees are working systematically to implement a risk and protective factor approach to prevention in the community level.

Whether we speak about abstinence or rejecting drugs, including methamphetamines, tobacco and alcohol, or promoting a healthy diet or a healthy lifestyle, we are really working toward the same objective. We want to reduce risk factors and promote protective factors. For the first time we have a real science-based approach to prevention at the community level.

As a result, we are transitioning our drug-specific programs to a risk-protective approach. This approach again provides States and communities with flexibility to target their dollars in the areas of greatest need.

PREPARED STATEMENT

In conclusion, we have been building systemic change so that no matter what drug trend emerges in the future, States and communities will be equipped to address it immediately and effectively before it reaches a crisis level.

Mr. Chairman, thank you very much for the opportunity to appear today and I will be pleased to answer any questions you may have.

[The statement follows:]

PREPARED STATEMENT OF HON. CHARLES G. CURIE

Mr. Chairman and Members of the Subcommittee, I am Charles G. Curie, Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA), within the U.S. Department of Health and Human Services (HHS). I am pleased to present SAMHSA's substance abuse prevention and treatment response to the growing methamphetamine crisis. It is abundantly clear that many of our most pressing public health, public safety, and human services needs have

a direct link to substance use disorders. This obvious link is why the Administration places such a great importance on increasing the Nation's public health approach to prevention and to increasing the Nation's substance abuse treatment capacity.

SAMHSA is working to do just that. Our everyday work at SAMHSA is structured around our vision of "a life in the community for everyone" and our mission "to build resilience and facilitate recovery." Our collaborative efforts with our Federal partners, States and local communities, and faith-based organizations, consumers, families, and providers are central to achieving both our vision and mission. Together, we are working to ensure that the 22.2 million Americans with a serious substance abuse problem have the opportunity to live, work, learn, and enjoy healthy lifestyles in communities across the country.

Much of what the future holds for the prevention and treatment of substance abuse is illustrated on the SAMHSA Matrix, a visual depiction of SAMHSA's priority programs and the cross-cutting principles that guide program, policy, and resource allocations of the Agency. Over the past 4 years, we have worked hard to align SAMHSA's resources to create systemic change. As we said we would, we have invested our available resources in the program priority areas outlined in the Matrix to provide a comprehensive, tactical approach to preventing substance abuse, promoting mental health, and treating addiction and mental illness.

Equipping communities with substance abuse treatment capacity is a clear priority for President Bush, HHS Secretary Leavitt, and Office of National Drug Control Policy (ONDCP) Director Walters. The Administration has embarked on a strategy that has two basic elements: discouraging drug use and reducing addiction; and disrupting the market for illegal drugs.

The strategy is backed by a \$12.4 billion Federal anti-drug budget in fiscal year 2006. SAMHSA has a lead role to play in the demand reduction side of the equation. SAMHSA helps stop drug use before it starts through education and community action, and we heal America's drug users by getting treatment resources where they are needed.

I am pleased to report that our strategy is working. By focusing our attention, energy, and resources, we as a nation have made real progress. The most recent data from the 2004 Monitoring the Future Survey, funded by the National Institute on Drug Abuse (NIDA), confirms that we are steadily accomplishing the President's goal to reduce teen drug use by 25 percent in 5 years. The President set this goal with a 2-year benchmark reduction of 10 percent. Last year we met and exceeded that goal. Now at the 3-year mark, we have seen a 17 percent reduction and there are now 600,000 fewer teens using drugs than there were in 2001.

Additionally, the most recent findings from SAMHSA's 2003 National Survey on Drug Use and Health clearly confirm that more American youth are getting the message that drugs are illegal, dangerous, and wrong. For example, 34.9 percent of youth in 2003 perceived that smoking marijuana once a month was a great risk, as opposed to 32.4 percent of youth in 2002. This is an indication that our partnerships and the work of prevention professionals, schools, parents, teachers, law enforcement, religious leaders, and local community anti-drug coalitions are paying off.

We know that when we push against the drug problem, it recedes, and fortunately, today we know more about what works in prevention, education, and treatment than ever before. We also know our work is far from over. In particular, we continue to be very concerned about abuse of prescription drugs and methamphetamine. The use of methamphetamine continues its assault as an extremely serious and growing problem.

THE GROWTH OF METHAMPHETAMINE USE

Methamphetamine use was initially identified in SAMHSA's Drug Abuse Warning Network (DAWN). DAWN is a public health surveillance system that monitors drug-related visits to hospital emergency departments and drug-related deaths that are investigated and reported by medical examiners and coroners across the country. In the early to mid 1990's, DAWN data served as an early warning about the rise of methamphetamine use.

Almost immediately, this early alert from DAWN was confirmed through another SAMHSA data reporting and analysis system, the Treatment Episode Data Set (TEDS). TEDS provides information on the demographic and substance abuse characteristics of the 1.9 million annual admissions to facilities that receive State alcohol and/or drug agency funds (including Federal Block Grant funds) for the provision of alcohol and/or drug treatment services. As early as 1992, TEDS data had indicated that methamphetamine treatment admissions were accounting for about 1 percent of all admissions. Within a decade, methamphetamine admissions grew at a rapid rate. Our most current 2002 TEDS data indicates the proportion of ad-

missions for abuse of methamphetamine has grown fivefold from 1992 to 2002, with an increase from 1 percent to 5.5 percent. Of those admitted in 2002 for the treatment of methamphetamine use, three-quarters (74 percent) were white and half (55 percent) of the admissions were male, with an average age at admission of 31 years.

Traditionally, methamphetamine users have been Caucasian, but use is now expanding to Hispanic and Asian populations, and Tribal leaders are reporting increased use of methamphetamines by Native Americans as well. Recent data from SAMHSA's 2002 and 2003 National Surveys on Drug Use and Health (NSDUH) indicates that a much younger population has grown vulnerable to methamphetamine's grip. The NSDUH now reports that young adults aged 18–25 had the highest rate of methamphetamine use among the 12 million Americans over the age of 12 who have used this illicit drug. Fortunately, the rates of past-year methamphetamine use among youths age 12–17 declined from 2002 to 2003, from 0.9 percent to 0.7 percent.

DAWN and TEDS data documented the proliferation of methamphetamine use over time, and a geographic pattern of methamphetamine use among the U.S. population emerged as well. Initially a problem in a few urban areas in the Southwest, methamphetamine use spread to several major Western cities and then east from the Pacific States into the Midwest, and now through the South and Southeast. For the United States as a whole, the methamphetamine/amphetamine admission rate increased by 420 percent between 1992 and 2002. Once thought of as a metropolitan drug problem, methamphetamine, or "meth," has now become a major drug problem in rural America and is the fastest-growing drug threat in the Nation.

The alarming growth of methamphetamine use and, in part, its popularity can be explained by the drug's wide availability, ease of production, low cost, and its highly addictive nature. It is a popular drug because it is a synthetic drug that is easy to make. It is often produced in small, makeshift "laboratories," using equipment and ingredients that are—for the most part—readily available at local drug, hardware, and farm supply stores. The instructions for making methamphetamines are easily found on the Internet, and the equipment needed is as simple as coffee filters, mason jars, and plastic soda or water bottles. Making it even more inexpensive and easy to produce is the essential ingredient, ephedrine or pseudoephedrine. As you know, these substances are commonly found in over-the-counter allergy and cold medicines. Producing an entire batch of methamphetamine can take less than four hours from start to finish, making it more readily available than other illicit drugs.

Complicating the efforts to stop methamphetamine's growth is its highly addictive nature. Immediately, methamphetamine use produces a brief but intense "rush," followed by a long-lasting sense of euphoria that is caused by the release of high levels of the neurotransmitter dopamine into areas of the brain that regulate feelings of pleasure. Eventually, methamphetamine leads to addiction by altering the brain and causing the user to seek out and use more methamphetamine in a compulsive manner. Chronic use leads to increased tolerance of the drug and damages the ability of the brain to produce and release dopamine. As a result, the user must take higher or more frequent doses in order to experience the pleasurable effects or even just to maintain feelings of normalcy.

Treatment for methamphetamine use, and substance abuse as a whole, has become an increasingly interconnected process, and the unmet treatment need in this country has become a weight that is carried by many. For example, methamphetamine users and their families, in addition to drug treatment programs, often rely on emergency rooms, the primary health care system, the mental health care system, child and family services, and the criminal justice system, all of which see parts of the problem. Addressing substance abuse, like methamphetamine use, often requires collaboration among law enforcement officers, prosecutors, judges, probation officers, treatment providers, prevention specialists, child welfare workers, legislators, business people, educators, retailers, and a number of other individuals, agencies, and organizations who all have critical roles in the prevention and treatment process.

SAMHSA'S ROLE IN TREATMENT

To help better serve people with substance use disorders, a true partnership has emerged between SAMHSA and the National Institutes of Health (NIH). Our common goal is to more rapidly deliver research-based practices to the communities that provide services. SAMHSA is partnering with the pertinent NIH research Institutes—NIDA, the National Institute on Alcohol Abuse and Alcoholism (NIAAA), and the National Institute of Mental Health (NIMH)—to advance a "Science to Service" cycle. Working both independently and collaboratively, we are committed to establishing pathways to rapidly move research findings into community-based practice

and to reducing the gap between the initial development and widespread implementation of new and effective treatments and services.

At the same time, we are working to ensure consumers and providers of mental health and substance abuse services are aware of the latest interventions and treatments. One important tool being used to accelerate the "Science to Service" agenda is SAMHSA's National Registry of Effective Programs and Practices (or NREPP). The value of the registry in the substance abuse prevention area has led SAMHSA to expand this effort to include substance abuse treatment, mental health services, and mental health promotion programs. The NIH Institutes are engaged with SAMHSA in identifying both an array of potential programs for review by the Registry, as well as a cadre of qualified scientists to assist in the actual program review process. We are committed to making the NREPP a leading national resource for contemporary, reliable information on effective interventions to prevent and/or treat mental health and addictive disorders.

To specifically address the needs resulting from methamphetamine abuse, SAMHSA began working in 1999 to evaluate and expand on the Matrix Model (not related to SAMHSA's Matrix), which was developed in 1986 by the Matrix Institute with support from NIDA as an outpatient treatment model that was responsive to the needs of stimulant-abusing patients. SAMHSA's Center for Substance Abuse Treatment compared the Matrix Model to other cognitive behavioral therapies in the largest clinical trial network study to date on treatments for methamphetamine dependence. The result was the development and release of a scientific intensive outpatient curriculum for the treatment of methamphetamine addiction that maximizes recovery-based outcomes.

SAMHSA also created and released "TIP #33: Treatment for Stimulant Use Disorders." Treatment Improvement Protocols (TIPs) are best practice guidelines for the treatment of substance use disorders and are part of the Substance Abuse Prevention and Treatment Block Grant technical assistance program. TIPs draw on the experience and knowledge of clinicians, researchers, and administrative experts. They are distributed to a growing number of facilities and individuals across the country. TIP #33 describes basic knowledge about the nature and treatment of stimulant use disorders. More specifically, it reviews what is currently known about treating the medical, psychiatric, and substance abuse/dependence problems associated with the use of two high-profile stimulants: cocaine and methamphetamine. SAMHSA has also published a Quick Guide for Clinicians as well as Knowledge Application Program (KAP) Keys that are also based on TIP #33.

Education and dissemination of knowledge are key to combating methamphetamine use. SAMHSA's Addiction Technology Transfer Centers (ATTCs) are providing training, workshops, and conferences to the field regarding methamphetamine. The Pacific Southwest ATTC has developed two digital Training Modules on Methamphetamine. Additionally, SAMHSA has collaborated with ONDCP, the National Guard Bureau's Counter Drug Office, NIDA, and the Community Anti-Drug Coalitions of America (CADCA) on a booklet, video tape, and PowerPoint presentation entitled, "Meth: What's Cooking in Your Neighborhood?" This package of products provides useful information on what methamphetamine is, what it does, why it seems appealing, and what the dangers of its use are.

Additionally, SAMHSA has been working in partnership with the Drug Enforcement Administration to provide funding to support a series of Governors' Summits on Methamphetamine. These summits provide communities with opportunities for strategic planning and collaboration building to combat methamphetamine problems faced in their own communities. Summits have been held in 15 States, including West Virginia, which will hold its Summit later this week.

SAMHSA also supports and maintains State substance abuse treatment systems through the Substance Abuse Prevention and Treatment Block Grant. Block Grant funds are used by States as appropriate to address methamphetamine abuse and all other substance abuse treatment needs. Throughout fiscal year 2004 and 2005, SAMHSA also awarded \$10.8 million in competitive grants for projects related to treatment for individuals using and/or abusing methamphetamine. Among them were the Methamphetamine Targeted Capacity Expansion (TCE) Grants. Our TCE grant program continues to help States identify and address new and emerging trends in substance abuse treatment needs. In fiscal year 2004, SAMHSA awarded funds to programs in four targeted areas including treatment focused on methamphetamine and other emerging drugs. Grants were awarded to six organizations located in California, Texas, Oregon, and Washington. In fiscal year 2005, SAMHSA expects to award approximately \$5.3 million for up to 11 new TCE grants focusing on treatment for methamphetamine addiction.

SAMHSA is working hard through grant mechanisms like the TCE grants to better provide States with the flexibility to begin meeting treatment needs as soon as

trends emerge. For example, in fiscal year 2004, SAMHSA provided funding to the States of Iowa and Hawaii for urgent methamphetamine-related treatment needs. Iowa also received funds to address the issue of drug-endangered children who are at risk as a result of living in homes where methamphetamine is manufactured. At the time the Emergency Methamphetamine Treatment Grant was awarded to Hawaii, SAMHSA's TEDS data was indicating a near doubling of adult admissions due to methamphetamine use there.

Hawaii and Iowa are just a few examples of States whose citizens are in need of substance abuse treatment services. As you know, there is a vast unmet treatment need in America, and too many Americans who seek help for their substance abuse problem cannot find it. Our recently released NDSUH for 2003 revealed an estimated 22 million Americans who were struggling with a serious drug or alcohol problem. The survey contains another remarkable finding. The overwhelming majority of people with substance use problems who need treatment—almost 95 percent—do not recognize their problem. Of those who recognize their problem, 273,000 reported that they made an effort but were unable to get treatment.

To help meet that need, SAMHSA will continue to fund services through the Substance Abuse Prevention and Treatment Block Grant and through the TCE Grant Program. And, now, within TCE we have Access to Recovery (ATR). Access to Recovery provides us a third complementary grant mechanism to expand clinical substance abuse treatment and recovery support service options.

In his 2003 State of the Union Address, President Bush resolved to help people with a drug problem who sought treatment but could not find it. He proposed ATR, a new consumer-driven approach for obtaining treatment and sustaining recovery through a State-run voucher program. State interest in Access to Recovery was overwhelming. Sixty-six States, territories, and Tribal organizations applied for \$99 million in grants in fiscal year 2004. We funded grants to 14 States and one Tribal organization in August 2004. Because the need for treatment is great—as methamphetamine abuse rates alone have demonstrated—President Bush has proposed to increase funding for ATR to \$150 million in fiscal year 2006.

Of the States that are now implementing ATR, Tennessee and Wyoming have a particular focus on methamphetamine. The State of Tennessee will use ATR-funded vouchers to expand treatment services and recovery support services in the Appalachians and other rural areas of Tennessee for individuals who abuse or are addicted primarily to methamphetamine. This program also will reach out to community and faith-based organizations to collaborate in this critical effort at a time when Tennessee has emerged as having one of the largest clusters of clandestine methamphetamine laboratories in the country. In these clandestine laboratories, the production of methamphetamine, which can be an extremely dangerous process, often leads to fires and explosions. Tennessee now accounts for three-quarters of such explosions in the South. Along with Tennessee, the Wyoming ATR program is also addressing the methamphetamine problem, focusing its efforts on Natrona County. This county has the second-highest treatment need in the State and is considered to be at the center of the current methamphetamine epidemic in Wyoming.

Wyoming and Tennessee are just two examples of ATR's potential. ATR's use of vouchers, coupled with State flexibility and executive discretion, offer an unparalleled opportunity to create profound positive change in substance abuse treatment financing and service delivery across the Nation. And, although it is reassuring to focus on treatment initiatives and the progress being made, we can and must do more to prevent drug use before it begins.

SAMHSA'S ROLE IN PREVENTION

SAMHSA's earlier efforts in preventing methamphetamine abuse were channeled through its Center for Substance Abuse Prevention's (CSAP) Methamphetamine and Inhalant Prevention Initiative. This initiative funded grantees that were battling methamphetamine's growth in communities across the country. For example, in Oregon, health officials were reporting an increase in the number of youth who were seeking treatment for addiction to methamphetamine. In 2002, the "Oregon Partnership Methamphetamine Awareness Project" was awarded a SAMHSA grant that targets 9th and 10th grade students over a 3-year period to prevent substance abuse among young people in school and community settings in rural Oregon. CSAP's Methamphetamine and Inhalant Prevention Initiative was designed to conduct targeted capacity expansion of methamphetamine and inhalant prevention programs and/or infrastructure development at both State and community levels.

To more effectively and efficiently align and focus our prevention resources, SAMHSA launched the Strategic Prevention Framework last year. SAMHSA awarded Strategic Prevention Framework grants to 19 States and 2 territories to advance

community-based programs for substance abuse prevention, mental health promotion, and mental illness prevention. We expect to continue these grants and fund seven new grants in fiscal year 2006 for a total of \$93 million. These grants are working with our Centers for the Application of Prevention Technology to systematically implement a risk and protective factor approach to prevention across the Nation. Whether we speak about abstinence or rejecting drugs, tobacco, and alcohol; or whether we are promoting exercise and a healthy diet, preventing violence, or promoting mental health, we really are all working towards the same objective—reducing risk factors and promoting protective factors.

The success of the framework rests in large part on the tremendous work that comes from grass-roots community anti-drug coalitions. That is why we are so pleased to be working with the ONDCP to administer the Drug-Free Communities Program. This program supports approximately 775 community coalitions across the country. Consistent with the Strategic Prevention Framework and the Drug Free Communities grant programs, we are transitioning our drug-specific programs to a risk and protective factor approach to prevention. This approach also provides States and communities with the flexibility to target their dollars in the areas of greatest need.

In conclusion, if we continue to foster these initiatives and further our goals of expanding substance abuse treatment capacity and recovery support services and of implementing the strategic prevention framework, we will simultaneously better serve people in the criminal and juvenile justice systems, those with or at risk of HIV/AIDS and hepatitis, our homeless, our older adults, and our children and families. We are doing our part at SAMHSA. We have been building systemic change so that no matter what drug trend emerges in the future; States and communities will be equipped to address it immediately and effectively before it reaches a crisis level.

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to appear today. I will be pleased to answer any questions you may have.

Senator HARKIN. Thank you very much, Mr. Curie, for that very succinct and straightforward statement. I appreciate it very much.

STATEMENT OF NORA D. VOLKOW, M.D., DIRECTOR, NATIONAL INSTITUTE ON DRUG ABUSE, NATIONAL INSTITUTES OF HEALTH, DEPARTMENT OF HEALTH AND HUMAN SERVICES

Senator HARKIN. Now we will turn to Dr. Nora Volkow, the Director of the National Institute on Drug Abuse or, as we say, NIDA. Before assuming this position 2 years ago, Dr. Volkow was Associate Director for Life Sciences at Brookhaven National Laboratory. Dr. Volkow received her M.D. in 1981 from the National University of Mexico in Mexico City and performed her residency in psychiatry at New York University. Dr. Volkow is an expert on the effects of drug abuse in the human brain and was the first person to use imaging to investigate the neurochemical changes that occur during drug addiction.

Dr. Volkow, welcome. Again, if you could summarize your statement I would sure appreciate it. Thank you.

Dr. VOLKOW. Mr. Chairman, thanks very much for giving me the privilege to be here with my colleagues to discuss how the knowledge gained from drug abuse research can help address the problems our Nation is facing from methamphetamine abuse. Methamphetamine is a very dangerous drug. Not only is it highly addictive, but it is also very toxic. Methamphetamine is a long-acting and very potent stimulant drug. It can be snorted, swallowed, injected, or smoked, and it is frequently taken in combination with other drugs.

Particularly dangerous is when the drug is injected or smoked since this leads to very fast and high concentrations of the drug in brain, increasing both its addictive as well as its toxic properties.

Unfortunately, we have seen a shift from the use of methamphetamine by the oral route in favor of smoking and injection.

Methamphetamine predominantly affects the cells in the brain that produce dopamine, a brain chemical that is important for reward, motivation, cognition, and movement. Like other drugs of abuse, it produces a sense of euphoria by increasing the release of dopamine in brain reward centers. In fact, methamphetamine is the drug of abuse that produces the largest increases in dopamine, three times greater than for cocaine, which accounts for its highly addictive properties.

Methamphetamine addiction progresses rapidly and the estimated time from initial abuse to chronic use is 1 to 2 years, much faster than it is for cocaine, which is estimated to be 3 years.

When dopamine is liberated in such high concentrations, it can damage the dopamine cells themselves. Indeed, several studies in laboratory animals have corroborated damage of dopamine cells by methamphetamine. In humans, imaging studies have shown that methamphetamine abusers show abnormalities in dopamine cells that are similar, though to a lesser severity, to those seen in Parkinson's patients.

The loss of dopamine cells that occurs with Parkinson's disease results in marked impairments in movement and in disruption in cognitive function. Similarly, the damage of dopamine cells in methamphetamine abusers also results in motor as well as cognitive impairment, albeit of a lesser degree.

The good news is that, different from Parkinson's disease, where the damage cannot be reverted, with protracted detoxification from methamphetamine there is some degree of recovery. This further highlights the importance of instituting treatment in methamphetamine abusers to maximize their chances of a successful recovery.

There are other toxic effects of methamphetamine. The large increases in dopamine produced by methamphetamine can trigger psychoses that in some instances persist months after drug discontinuation. Also, because methamphetamine affects the contractions of blood vessels it can result in myocardial infarcts, it can result in cerebral strokes, it can result in cerebral hemorrhages in young patients.

In addition to its effects on the brain, methamphetamine intoxication is inextricably linked to risky sexual behaviors, thus increasing the risk for transmissions of infectious diseases, such as HIV. The recent case of a methamphetamine abuser with a particularly virulent strain of HIV is a sobering reminder of this connection.

Those who inject the drug risk contracting HIV through the sharing of contaminated equipment and methamphetamine's physiological effects may also facilitate the transmission. Preliminary studies suggest that HIV-positive methamphetamine abusers who are on antiretroviral therapy are at a greater risk of progressing to AIDS than non-users.

Methamphetamine addiction can be treated successfully. The Matrix model initially developed through NIDA-supported research has been shown to prevent relapse. Other behavioral treatments are being developed and tested through NIDA's National Drug Abuse Clinical Trial Network and also show promise for the treatment of methamphetamine addiction.

NIDA is also investing in the development of new medications for methamphetamine addiction. For example, a preliminary study of an anti-epileptic medication, gamma-vinyl/GABA, shows that half of the treated patients remained drug-free at least for 6 weeks, even when living in an environment that allowed them ready and easy access to the drug. NIDA's methamphetamine clinical trial group is also testing modafinil, a medication used to treat narcolepsy which has been shown to be effective in cocaine addiction.

In parallel, NIDA is pursuing the development of an immunization strategy based on monoclonal antibodies for the treatment of overdose with methamphetamine.

PREPARED STATEMENT

In summary, NIDA has long recognized the danger of methamphetamine abuse and has actively supported research on these and related drugs. This research continues to help us further elucidate methamphetamine's effects on the brain and its consequences on behavior. This work is critical both in developing prevention strategies to control its abuse and on therapeutic interventions to treat those who need it.

Thank you for allowing me to share this information with you and I will be happy to answer any questions you may have.

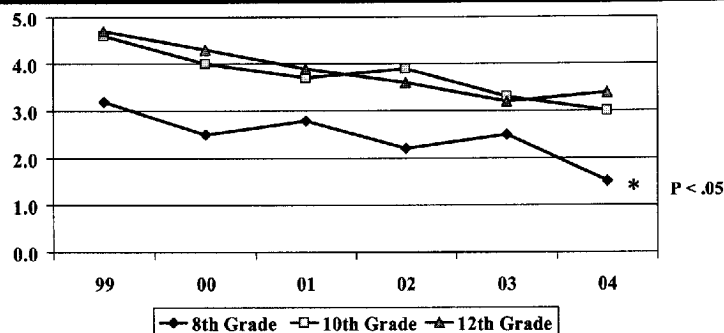
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PREPARED STATEMENT OF DR. NORA D. VOLKOW

Mr. Chairman and Members of the Committee: Thank you for inviting the National Institute on Drug Abuse (NIDA), a component of the National Institutes of Health (NIH), an agency of the U.S. Department of Health and Human Services, to participate in this important hearing. As the world's largest supporter of biomedical research on drug abuse and addiction, we have learned much about the behavioral and health effects of methamphetamine (METH). I am pleased to be here today to present an overview of what the science has taught us about METH, a stimulant drug that can have devastating medical, psychiatric, and social consequences. NIDA has been conducting basic research on METH for more than 20 years; however, as its use has increased, NIDA's research efforts have also increased. In fact, NIDA funding of METH-related research increased almost 150 percent from 2000–2004, through which NIDA has been tracking its use and supporting multifaceted research aimed at better understanding how the drug affects the brain, its consequences for the brain and behavior, as well as developing effective treatments for METH addiction.

According to NIDA's Monitoring the Future Survey, we are seeing significant decreases in METH use among eighth graders; however, the use among 10th and 12th graders appears to have stabilized (Figure 1). Of greater concern are findings from NIDA's Community Epidemiology Work Group (CEWG), which monitors drug abuse problems in sentinel areas across the Nation and is alerting us to increases in some CEWG areas and continued spread into rural communities. Moreover, according to the Treatment Episode Data Set from the Substance Abuse and Mental Health Services Administration (SAMHSA), the number of people seeking treatment for METH/amphetamine abuse has also steadily increased from 1996–2002.

Figure 1. According to the Monitoring the Future Study Methamphetamine is not Increasing



Percent of Students Reporting Use of Methamphetamine in Past Year, by Grade

Methamphetamine is a Schedule II stimulant, which means it has a high potential for abuse and is available only through a prescription. There are only a few accepted medical indications for its use, such as the treatment of narcolepsy and attention deficit hyperactivity disorder. As a powerful stimulant, methamphetamine, even in small doses, can increase wakefulness and physical activity and decrease appetite. METH comes in many forms and can be snorted, swallowed, injected, or smoked, the preferred method of use varying by geographical region and changing over time. Faster routes of administration, such as smoking and injecting, have become more common in recent years, further increasing its addiction potential as well as the severity of its consequences.

METH acts by affecting many brain structures but predominantly those that contain dopamine, due to similarities in the chemical structures of METH and dopamine. METH produces a sense of euphoria by increasing the release of dopamine. In fact, amphetamines are the most potent of the stimulant drugs in that they cause the greatest release of dopamine, more than three times that of cocaine. This extra sense of pleasure is followed by a "crash" that often leads to increased use of the drug and eventually to difficulty in feeling any pleasure.

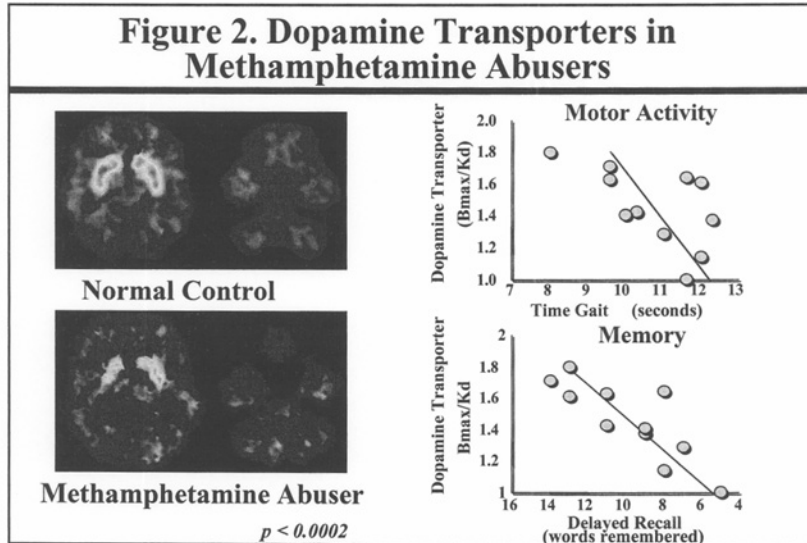
Long-term methamphetamine abuse can result in many damaging consequences, including addiction. We know from research that addiction is a chronic, relapsing disease, characterized by compulsive drug seeking and use, which is accompanied by functional and molecular changes in the brain. In addition to being addicted to methamphetamine, chronic methamphetamine abusers exhibit symptoms that can include violent behavior, anxiety, depression, confusion, and insomnia. They also can display a number of psychotic features, including paranoia, auditory hallucinations, and delusions.

NIDA-supported research has also shown that METH can cause a variety of cardiovascular problems, including rapid heart rate, irregular heartbeat, increased blood pressure, and irreversible, stroke-producing damage to small blood vessels in the brain. Hyperthermia (elevated body temperature) and convulsions occur with METH overdoses and, if not treated immediately, can result in death.

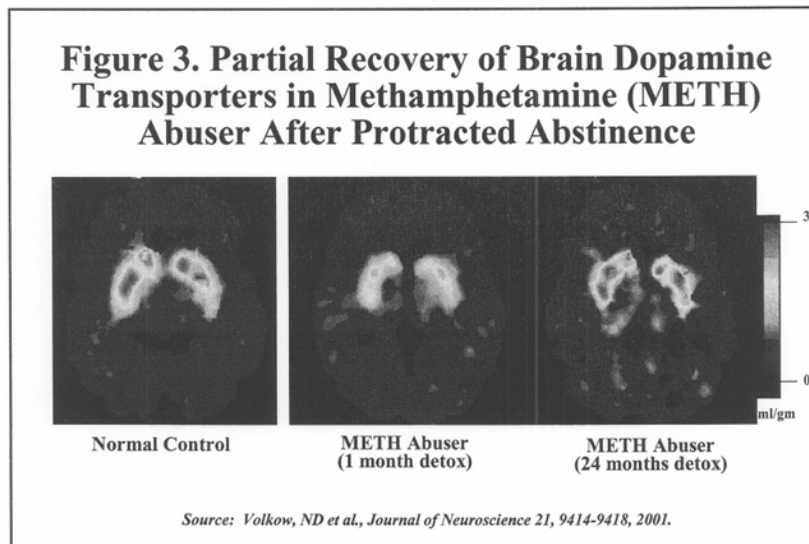
WHAT DOES METHAMPHETAMINE DO TO THE BRAIN?

In animals, methamphetamine has been shown to damage nerve terminals in the dopamine- and serotonin-containing regions of the brain. Similarly, studies of methamphetamine abusers have demonstrated significant alterations in the activity of the dopamine system that are associated with reduced motor speed and impaired verbal learning (Figure 2). One small study also correlated changes in a marker of dopamine function with the duration of METH use and the severity of psychiatric symptoms. Moreover, recent studies of chronic METH abusers have revealed severe

structural and functional deficits in areas of the brain associated with emotion, specifically depression and anxiety, as well as memory.



Although METH can produce long-lasting decreases in dopamine function, which appear to mimic the loss of dopamine seen in diseases like Parkinson's disease, autopsy studies show that the motor regions most affected in Parkinson's disease are not as severely affected in METH abusers. However, the possibility exists that moderate METH-induced effects during early life could make an individual more susceptible to Parkinsonism later in life. In contrast, METH-induced deficits in cognitive regions can be as severe as those in Parkinson's disease patients. The observed damage in Parkinson's disease is permanent due to considerable dopamine cell death. Dopamine cell death has not been documented in methamphetamine abusers, which could explain why with extended abstinence, there is some recovery from METH-induced changes in dopamine function (Figure 3).



A recent neuroimaging study of METH abusers showed partial recovery of brain function in some brain regions following protracted abstinence, associated with improved performance on motor and verbal memory tests. However, function in other regions did not display recovery even after two years of abstinence, indicating that some methamphetamine-induced changes are very long-lasting. Moreover, the increase in risk of cerebrovascular accidents from the abuse of methamphetamine can lead to irreversible damage to the brain.

DEVELOPMENTAL EXPOSURE

In addition to its known effects in adults, NIDA is very concerned about the effects of METH on the development of children exposed to the drug prenatally. Unfortunately, our knowledge in this area is limited. The few human studies that exist have shown increased rates of premature delivery; placental abruption; fetal growth retardation; and cardiac and brain abnormalities. For example, a recent NIDA-funded study showed that prenatal exposure to methamphetamine resulted in smaller subcortical brain volumes, which were associated with poorer performance on tests of attention and memory conducted at about 7 years of age. However, most of these human studies are confounded by methodological problems, such as small sample size and maternal use of other drugs. For this reason, NIDA recently launched the first large-scale study of the developmental consequences of prenatal METH exposure, which includes seven hospitals in Iowa, Oklahoma, California, and Hawaii, states where METH use is prevalent. This study will evaluate developmental outcomes such as cognition, social relationships, motor skills and medical status.

Our knowledge about the effects of METH use later in development is also incomplete. Despite the stable low levels of METH use for 10th and 12th graders, we are concerned with any use of METH in this age group. Because the brain continues to develop well into adolescence and even early adulthood, exposure to drugs of abuse during this time may have a significant impact on brain development and later behavior. Additional research will help us understand the effects of METH use during childhood and adolescence and whether these effects persist into adulthood.

METHAMPHETAMINE AND HIV

Drug abuse remains one of the primary vectors for human immunodeficiency virus (HIV) transmission. The recent case of an HIV-infected METH abuser in New York City with a particularly virulent strain of HIV is a sobering reminder of the link between drug abuse and HIV. Methamphetamine is inextricably linked with HIV, hepatitis C, and other sexually transmitted diseases. METH use increases the risk of contracting HIV not only due to the use of contaminated equipment, but also due to increased risky sexual behaviors as well as physiological changes that may favor HIV transmission.

Preliminary studies also suggest that METH may affect HIV disease progression. For example, animal studies suggest that METH use may result in a more rapid and increased brain HIV viral load. Moreover, in a study of HIV-positive individuals being treated with highly active anti-retroviral therapy (HAART), current METH users had higher plasma viral loads than those who were not currently using METH, suggesting that HIV-positive METH users on HAART therapy may be at greater risk of developing acquired immune deficiency syndrome (AIDS). These differences could be due to poor medication adherence or to interactions between METH and HIV medications. Similarly, preliminary studies suggest that interactions between METH and HIV itself may lead to more severe consequences for METH abusing, HIV-positive patients, including greater neuronal damage and neuropsychological impairment. More research is needed to better understand these interactions.

To address these issues, NIDA recently invited applications for administrative supplements to current grants to support studies on HIV in METH abusers. While there have been many studies on METH and both injection and risky sexual behavior, there is very little information on METH and HIV disease progression or on the prevalence of drug-resistant virus in METH abusers. Therefore, NIDA is planning to establish a targeted surveillance initiative to monitor the development of drug-resistant HIV in METH abusers.

WHAT ELSE IS NIDA DOING?

NIDA continues to support a comprehensive research portfolio on methamphetamine's mechanism of action, physical and behavioral effects, risk and protective factors, treatments, and potential predictors of treatment success. For example, recent studies have identified genetic variants that may be associated with an individual's response to various drugs of abuse. One such NIDA-funded study

demonstrated that individuals with a particular variant of the dopamine transporter gene were less able to feel the effects of amphetamine, suggesting that people with this genotype may be protected from dependence because of a lack of reactivity to the drug. Understanding genetic risk and protective factors may aid in the development of targeted prevention efforts. At the other end of the spectrum, NIDA-supported research is also seeking to identify markers to predict which METH-dependent patients may be more likely to relapse to drug use following treatment. For example, a recent study noted that decreased brain activation during a decision-making task correctly predicted which patients would relapse to METH use. These findings may provide an approach for assessing susceptibility to relapse early during treatment as well as lead to new treatment approaches that are targeted towards rehabilitating these deficits, thereby increasing a patient's chance for long-term sobriety.

NIDA's efforts over the years to understand the basic science underlying METH's actions are now paying off in the development of treatments for METH addiction. In early 2000, NIDA convened a group of experts to provide guidance on the establishment and research focus of NIDA's methamphetamine treatment program. In response to one of their recommendations, NIDA launched a methamphetamine medications development initiative to use animal models to identify, evaluate, and recommend potential treatments to reduce or eliminate drug-seeking behaviors and drug effects, such as reversing neurotoxicity and cognitive impairment.

To further speed medication development efforts, NIDA has also established the Methamphetamine Clinical Trials Group (MCTG) to conduct clinical (human) trials of medications for METH in geographic areas in which METH abuse is particularly high, including San Diego, Kansas City, Des Moines, Costa Mesa, San Antonio, Los Angeles, and Honolulu. For example, modafinil, a medication for the treatment of narcolepsy, which has shown preliminary efficacy in cocaine treatment and may have positive effects on executive function and impulsivity, will be tested in the MCTG for its potential in the treatment of METH addiction. Other NIDA-supported studies are also developing promising medications. For example, a preliminary study of an anti-epileptic medication, gamma-vinyl GABA (GVG), showed that half of the GVG-treated patients remained drug free for approximately six weeks despite living in their normal home environment with ready access to drugs. To treat METH overdose, NIDA is pursuing the development of monoclonal antibodies to METH, which bind to the drug in the bloodstream thereby preventing its action.

In addition to pharmacological treatments, NIDA is invested in the development and testing of behavioral treatments. Studies have now shown that a treatment program known as the Matrix Model can be used successfully for the treatment of METH addiction. The Matrix Model was initially developed in the 1980s for treating cocaine addiction. It consists of a 16-week program that includes group and individual therapy and components that address relapse and how to prevent it, behavioral changes needed to remain off drugs, communication among family members, establishment of new environments unrelated to drugs, and other relevant topics. When applied to METH abusers, the Matrix Model has been shown to result in a high proportion of METH-free urine samples at program completion and 6-month follow-up.

Another behavioral treatment, Motivational Incentives for Enhancing Drug Abuse Recovery (MIEDAR), an incentive-based method for cocaine and METH abstinence, has recently been tested through NIDA's National Drug Abuse Clinical Trials Network and also shows promise for the treatment of METH addiction. MIEDAR is currently being developed for dissemination to community treatment providers through NIDA's collaborative Blending Initiative with SAMHSA.

Because no single behavioral treatment will be effective for everyone, research into behavioral approaches for treating METH addiction is ongoing. In 2005, NIDA solicited additional research applications on the development, refinement, and testing of behavioral and combined behavioral and pharmacological (and/or complementary/alternative) treatments for METH abuse and dependence. We expect that, as with other types of addiction, combining pharmacotherapies with behavioral therapies will be the most effective way to treat METH addiction.

Because of the prevalence of drug abuse among the criminal justice population, NIDA, in collaboration with NIH's National Institute on Alcohol Abuse and Alcoholism, SAMHSA, and other federal agencies, established the Criminal Justice Drug Abuse Treatment Research Studies (CJ-DATS), a major research initiative, bringing together researchers, criminal justice professionals, and addiction treatment providers, to develop new strategies to help drug abusing offenders. As part of our efforts to combat METH addiction, CJ-DATS is collecting self-report and biological data on methamphetamine use and investigating the effectiveness of treatments in criminal justice settings for those who abuse methamphetamine. Within CJ-DATS

we are also supporting two research protocols testing comprehensive treatment approaches for juvenile offenders, including those who abuse METH.

CONCLUSION

In closing, I would like to say that as someone who has spent almost 25 years studying the effects of psychostimulants on the brain, I am particularly concerned about the methamphetamine problem in this country both because of its powerful addictive potential and because of its high toxicity. One of NIDA's most important goals is to translate what scientists learn from research to help the public better understand drug abuse and addiction and to develop more effective strategies for their prevention and treatment. NIDA has long supported research on methamphetamine, which is now paying off in the development of effective treatments, and it is critical that these treatments become more readily available to those who need them.

Thank you for allowing me to share this information with you. I will be happy to answer any questions you may have.

Senator HARKIN. Thank you very much, Dr. Volkow, and I will have some questions about your charts, maybe flesh that out a little bit more, when we get into the questions and answers.

STATEMENT OF VICKI SICKELS, DES MOINES, IOWA

Senator HARKIN. Now I would like to introduce Ms. Vicki Sickels. Ms. Sickels was born in Sioux City, Iowa, raised in Creston, she told me. She received a bachelor's degree in expressive arts from the University of Iowa in 1982. I am told she became addicted to meth in 1988, finally gained lasting recovery a decade later after receiving long-term residential treatment.

She then became certified as a substance abuse counselor and obtained her master social worker degree from the University of Iowa. She is currently employed as the chemical dependency counselor for a methamphetamine research program at Iowa Lutheran Hospital in Des Moines and does prevention work for the AIDS Project of Central Iowa.

Ms. Sickels, again thank you very much for being here. Again, please proceed as you so desire.

Ms. SICKELS. Thank you, Senator Harkin. It is an honor to be here and I would like to thank other people at the table and in the room for the work that they do on substance abuse.

I would like to stress the fact that I came from a middle class family. My father was a civil engineer. My mother was a stay-at-home mom. There was not substance abuse or physical abuse of any kind in my household. I had a pony and piano lessons and I was an honor student and sent to college at the University of Iowa.

As a teenager and a college student, I experimented and I was a binge-drinking college student and would try really anything that came across my plate. But I was able to walk away from those things and I was able to continue with my life and graduate from college. It was nothing that really yanked the rug out from underneath me the way that methamphetamine did.

When I discovered methamphetamine or it was introduced to me in 1988, I had never heard of it. I did not know what it was. I thought it was what a person did if they could not find any cocaine. It was really love at first dose for me. The first time I did it, I had been drinking and then I woke up just a couple hours after I went to bed or passed out or whatever that was, but I woke up and just was driven to get my journal and write.

I am a writer and I was writing poetry and really prolific and thought, wow, this is something. It is one of those drugs that make you feel like you can do anything, you can do several things at once, you can make it all work for a while. Then at some point you become so disorganized, really what happens is you lose your mind and you lose just about everything.

It got to the point where meth was all I was doing after just a few months of doing it. At that time I left the town that I was in, where everyone I knew was doing it, and managed to stay clean for a year or so while I had my child. But unlike other drugs, where I went away and continued with my life, it sort of comes up wherever you go. I moved from Red Oak to Iowa City and it came up again in Iowa City. Then I left there and went to Creston and there it was again.

So the first time I went to treatment was in 1993 and my family noticed that I was not taking very good care of my 3 year old son. They could tell that he was being neglected. So they encouraged me to do something about my addiction or they were going to do something for me. So I went into treatment in Des Moines. I went to a 28-day inpatient treatment, and they suggested that I went to a halfway house, but I had things to do; I was not going to do that.

So I did the 28 days and then I went to Narcotics Anonymous meetings and had a sponsor and did everything I was supposed to do. But after 6 months I could not maintain it and I relapsed. After that relapse, it took me 5 years to get back into recovery again. During that 5 years I really became a different person. I was unable to hold a job. I would get factory jobs and they would last maybe a month or 2 and then I would be fired because I could not show up or could not show up on time. One job, I called and said—you know that bug thing that they talk about with meth—I treated my whole house and everybody, all my stuff, and I called them up the next day and said: I just took care of this yesterday and they are back again today. They said: You do not need to come back, thank you. So that happened.

I was evicted from the house I was living in by my folks because they knew what I was up to. They had me committed at one time, but I was not ready to quit. My behavior was so bizarre that they had me committed for an evaluation. At that time I was sentenced to outpatient treatment. In Union County at that time outpatient treatment was one session one time a week with a counselor, and that was not going to do me a bit of good.

My things were stolen, my things were lost, I was evicted more than once. At one time my son and his father and I were living with a woman in a house south of Iowa City and I—I am a very peaceful person, but I punched this woman and knocked her down in front of the deputy sheriff and spent a night in jail for assault.

We spent a lot of time going back and forth from town to town. Always we would stay clean for a month or 2 and then we would find the people or the people would find us who had it. Then in 1998 meth labs exploded in Iowa, and someone was released from prison and came out with a recipe for methamphetamine and he taught the people in our little subgroup how to do it.

So we would supply different ingredients and a place to do it and we were part of this team of meth makers. That blew up in our face. Well, the lab did not blow up, but we were caught doing that.

So at that time I had friends who took me by the hand and called the treatment center and helped me pack my bags, because I still was convinced: You know, I have had treatment before; I can go to meetings and I can quit this. They said: You cannot. They drove me to treatment and got me there.

Once I was there long enough to realize what I needed this time, because I never wanted to come back again, I got on the list for the halfway house. So of course I was an unemployed, uninsured meth addict, so it was State-funded treatment that I had, and the long-term residential treatment that I went to was a halfway house in Des Moines. That was State and Federally funded.

Then I had the long-term support of my family.

Senator HARKIN. How long? How long?

Ms. SICKELS. It was 90 days that I was in the halfway house and then it was about 3 years that I stayed at—I call it my sister's three-quarters of the way house, because she was a safe person that I could live with while I went to school and learned to live again.

There was a year after I got clean where I bagged groceries at a grocery store and it was all I could do to suit up and show up and just learn how to put one foot in front of the other again and live. I can remember that during that year I would feel really good about where I was and then really low. There was just highs and lows, until about a year, and then it sort of evened out.

Then I had a plan and I was in school and it sort of evened out. So when I see the brain imaging, I think it makes sense. It was the way I felt.

But it was the long-term residential treatment that really worked for me.

Senator HARKIN. So even after you quit taking meth, you felt that there were some after effects. I have read about this. I am going to ask some of our experts about this.

Ms. SICKELS. Absolutely, absolutely.

But I am sitting here to tell you that treatment works.

Senator HARKIN. How long ago was all this now?

Ms. SICKELS. It will be 7 years in July.

Senator HARKIN. Since then you went on and got your master's degree.

Ms. SICKELS. Uh-hmm.

Senator HARKIN. You are now counseling.

Ms. SICKELS. Uh-hmm. Also, I wanted to mention, we talked about HIV and methamphetamine. Hepatitis C is huge. Hepatitis C is also epidemic. Injecting drug users think that they are not going to get it because they do not share needles. But it is a harder virus than HIV, so if they are sharing spoons and cottons and water—I do not know that I mentioned that I was an injecting drug user. I do not think I did. But I was, and I ended up with hepatitis C.

Most of the people that I used with have hepatitis C as well. In my work as a prevention counselor at the AIDS Project, I counsel a lot of people who are testing positive for hepatitis C. It is huge.

Senator HARKIN. Wow. Well, Ms. Sickels, that is a heck of a story. My goodness. I just congratulate you.

Ms. SICKELS. Thank you.

Senator HARKIN. It is a lot of will power.

Ms. SICKELS. Thanks. Actually, it was a lot of help. It took a whole team to get me where I am today.

Senator HARKIN. That is what I think we have got to get into and talk maybe to Mr. Curie and others, about how do you build up the systems approach to this thing.

Ms. SICKELS. Right, because I was so blessed to have a supportive family. A lot of the people that I work with, they go home and mom is using meth.

Senator HARKIN. I am going to move on to Mr. Steinberg, but one thing that Sheriff Anderson, who is the sheriff of Polk County, Des Moines, told me, that the amount of time that they are spending in treatment is not long enough.

Ms. SICKELS. Not at all.

Senator HARKIN. They are in and then they are out, and they just do not have the facilities for them. So I see a lot of heads nodding. Well, we will get into that too.

Thank you, Ms. Sickels, very much. We will get back, we will have some more interaction here in a second.

STATEMENT OF RICHARD E. STEINBERG, PRESIDENT AND CHIEF EXECUTIVE OFFICER, WESTCARE FOUNDATION, INC., AND PRESIDENT, THERAPEUTIC COMMUNITIES OF AMERICA

Senator HARKIN. Now we turn to Richard Steinberg, President and CEO of WestCare, a company that provides substance abuse treatment services in six States. He is also the current President of Therapeutic Communities of America and an appointed member of SAMHSA's Center for Substance Abuse Treatment National Advisory Council.

Mr. Steinberg received his bachelor of arts degree in psychology from California State University at Long Beach, his master of science in rehabilitation counseling from the University of Nevada in Las Vegas.

Mr. Steinberg, welcome.

Mr. STEINBERG. Thank you, Mr. Chairman.

Senator HARKIN. Please, if you could summarize your statement I would appreciate it.

Mr. STEINBERG. Thank you. I appreciate, Senator, you taking actually the time to do this hearing today. This is very important to many of us throughout the Nation and it certainly affects my agency in the different States that we are operating.

I also would like to take a moment just to say that I am pleased and honored to be on a panel with such distinguished folks. Charlie Curie at SAMHSA has been a great friend and supporter, not only to our agency at WestCare, but a lot of my colleagues throughout the United States, and, wearing a double hat as President of TCA, he has done a tremendous amount with that group in actually looking at different approaches and not just getting into old approaches and staying fixed, but working in the mental health arena and the overlaps that we have with mental health and substance abuse. He has done a great job for us.

Nora and everybody out at NIDA has been really tremendous with our field. One of the things that we used to have in the early days, we were always frustrated as treatment providers because there was research being done and we did not understand where that fit with what we were doing. Everybody at NIDA now has really worked with us—I call it “where the rubber meets the road,” the research and the issues and how that gets transferred and implemented in the field. Her staff has just been dynamite to work with and help us.

Sitting next to Vicki Sickels, this is what it is all about and why we are in this business. To hear you and hear you talk, I do not know the rest of us have a lot to say today after listening to her, because this is really what it is all about.

The issue of meth, methamphetamine, is extremely bad, obviously. It is throughout the Nation and actually in other countries it is an emerging issue there as well. It is very high, very potent, very cheap to make, very cheap to get. It involves all kinds of different systems. But it is out here, and it is hard to ignore.

The treatment approaches, the treatment really works. In this case, you hear a lot of different people come along who have not spent any time and say, well, maybe it does not work. Well, it really does work. I think Ms. Sickels is an example of how that does work.

But we are talking about longer-term needs for treatment. This is not a quick fix. Rarely does somebody seek out treatment just because they used it one time and they showed up the next day with help, or needing the help. But normally people have really kind of lost everything by the time they come in for treatment. So longer-term approaches are really needed.

The therapeutic community model is a long-term system. Dr. Volkow talks about 24 months that it can still be in the system, and the brain and where it is at. These systems of care need to be longer term. You cannot have a quick fix to it. I just share that as a real concern.

WestCare, our programs are nonprofit, community-based. I guess I want to make sure that I stress that a little bit, that these are agencies—and we are not unique throughout the United States—that come together with community citizens being on boards of directors and working with State systems, and basically we are treating the people on the first bounce.

Usually the people who come to us do not even have insurance. It is an important piece because we rely heavily on the block grant and the block grant systems and how that is affecting our delivery of care. This brings in some other issues, too, that people are really struggling now to where and how to treat the masses of this.

Las Vegas has a real growing issue of people moving in, about 7,500 a month. As Senator Reid talked about earlier, we have a real issue with a lot of drugs coming in. You hear the comic stuff on TV, you know, what happens in Vegas stays in Vegas, and that also happens with the drug trade and the drug issues that are going on.

Some of the stats that we have we think are actually low, but we have an overcrowding of emergency rooms for mental health and substance abuse, with meth being kind of the key issue being

brought in right now. Emergency rooms are very overcrowded. We have come up with a system there where all the hospitals have worked together to move them on to community-based systems. So that is an important piece in my mind to work with, and it is expanding. We have about 8,000 this year coming in out of Las Vegas alone from emergency rooms for these systems of care.

It is important to also point out that as we are doing our programs in all the different States, the meth issue is not something like we saw in the 80s when we came before Congress to talk about crack cocaine in the inner cities. This is in rural America, this is in suburbia America. It is all walks of life are involved. It is hitting everybody and it is not just a small issue or a small problem, as we have seen. Not that the issues were small in the past, but they are in the one area.

My concern is that we really need to address this head on, this meth problem in the Nation. My concern also is that we do not take block grants and we earmark them just for one type of issue only, because there has been some stuff over the past that I have been concerned with and those of us in the field where we came back—and we did this in the 80s with crack cocaine—saying, we will just do all this for crack cocaine or just do all this for HIV drug users or we will just do this for moms and babies.

PREPARED STATEMENT

Methamphetamine is across the board and we need to be able to allow the block grant systems to go into States and allow the States to determine the best usage of those block grants to work within their communities, because drug issues change. Those of us who are in the business of dealing with methamphetamine are still dealing with heroin today and alcohol and all the other drugs as well. So it is not just one drug only, but meth is certainly a serious problem.

I thank you for allowing me to talk.

[The statement follows:]

PREPARED STATEMENT OF RICHARD E. STEINBERG

Mr. Chairman and Members of the Subcommittee, my name is Dick Steinberg, and I am President and CEO of the WestCare Foundation. I also serve as President of Therapeutic Communities of America (TCA), a membership association representing nonprofit community-based treatment providers throughout the United States. I will focus my testimony on the scope of the methamphetamine abuse and addiction problem in Nevada, on WestCare's therapeutic communities (TC) treatment model, and on how WestCare and other therapeutic communities are working to address the problems associated with the growing abuse of methamphetamine. From this point forward in my testimony, I will refer to methamphetamine simply as "meth."

First, I would like to thank the Subcommittee for the opportunity to testify. I am privileged to provide testimony alongside Mr. Charles G. Curie, Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA) and alongside Dr. Nora Volkow, the Director of the National Institute on Drug Abuse (NIDA). Mr. Curie and Dr. Volkow are strong leaders in their respective but related fields of substance abuse treatment and drug abuse research. I would also like to thank Ms. Vicki Sickels for testifying today.

I would also like to take this opportunity to thank Senator Harry Reid for his outstanding leadership on the issues of substance abuse treatment and mental health treatment. Senator Reid continues to provide strong support for the funding of NIDA and SAMHSA. In 2001, Clark County, Nevada was designated a High-Intensity Drug Trafficking Area. I appreciate Senator Reid's support for this designation.

Founded in 1973, WestCare provides a spectrum of health and human services in both residential and outpatient environments. Our services include substance abuse and addiction treatment, homeless and runaway shelters, domestic violence treatment and prevention, and behavioral and mental health programs. These services are available to adults, children, adolescents, and families; we specialize in helping people traditionally considered difficult to treat, such as those who are indigent, have multiple disorders, or are involved with the criminal justice system.

As mentioned earlier, I am also President of Therapeutic Communities of America (TCA), a national membership association representing over 500 non-profit programs dedicated to providing treatment to substance-abusing disadvantaged Americans with multiple barriers to recovery. Therapeutic communities (TC) believe that substance abuse clients have multiple barriers to recovery, in addition to their drug use. Most clients within a TC have cycled through our criminal justice and human service systems numerous times before getting to the TC. Through modified programs based on evidence-based research, TCs have been able to demonstrate successes even with the most difficult of populations served. Therapeutic communities, through federal and State funding, have been able to treat America's most vulnerable at-risk populations.

In 2004, WestCare provided treatment services to over eighty thousand (80,000) clients in six states (Arizona, California, Florida, Georgia, Kentucky, and Nevada) and the U.S. Virgin Islands. WestCare is seeing large and growing numbers of persons of all ages and backgrounds who abuse or are addicted to meth. In 2004, WestCare provided drug treatment services for over twenty-seven thousand (27,075) persons. Of this amount, over twelve thousand (12,692) were addicted to meth or cited usage during their assessment. Nearly 50 percent of the clients we serve for substance abuse treatment report abusing meth.

Our experiences in Nevada show that athletes and students sometimes begin using meth because of the initial heightened physical and mental performance the drug produces. Blue collar and service workers may use the drug to work extra shifts, while young women often begin using meth to lose weight. Others use meth recreationally to stay energized at "rave" parties or other social activities. Meth is generally less expensive and more accessible than cocaine. Users often have the misconception that meth, while illegal, is not a harmful drug.

Based on WestCare's experiences in Nevada and elsewhere, we believe that teenagers are highly susceptible to meth abuse and addiction. Many of our clients are youth or adults who have previously used Ritalin or other stimulants to treat Attention Deficit Hyperactivity Disorder (ADHD). The self-reported meth use trends for youth in Nevada are disturbing. Six percent (6 percent) of middle school students and sixteen percent (16 percent) of high school students in Nevada have reported using meth one or more times in their lives. Middle and high school students in Nevada report having used meth more than report having used cocaine. Self-reported meth use among this age group is approximately equal to self-reported use of heroin, hallucinogens, depressants or tranquilizers.

WestCare's drug and alcohol treatment program works with adjudicated youth ages 12 to 18 who have been assessed as having a substance abuse or addiction disorder. Our internal statistics show 52 percent of the female population and 14 percent of the male population cite meth as their drug of choice. The high percentage of females identifying meth as their drug of choice has motivated treatment counselors to address issues pertaining to meth use by teenage females.

Meth abuse is not limited to teenagers. Our experience is that meth addiction can be a generational addiction sometimes including multi-generation use in one household: grandmother, parent, son or daughter using together. Multi-generational meth abuse and addiction presents significant challenges to treatment providers.

Our experience is that meth abuse and addiction is often associated with long-term mental health disorders. Meth use may occasionally cause blurred vision, dizziness, and loss of coordination. Users may occasionally experience chemically induced schizophrenia and toxic psychosis. WestCare's clients have experienced brain toxicity, kidney, liver and lung failure, and heart disease. Users may occasionally experience permanent brain damage—even with minimal use.

From our experience, meth is a "crisis" drug. The affects of meth on the human brain can lead to severe short-term disorientation and violence. In 2003–2004, there were 780 calls to the Reno, Nevada Crisis Call Centers associated with drug addiction. Of those calls, 242, or nearly one-third, were associated with meth abuse. If these figures can be extrapolated state-wide, meth abuse is generating approximately one-third of all crisis drug abuse treatment calls in the state of Nevada.

WestCare is working to deliver the best available diagnostic practices for treating meth abuse and addiction. WestCare's experience is that long-term meth abusers require longer terms of treatment than abusers of other substances, in part because

of the length of time required for the brain to heal from meth-caused damage. WestCare has experienced a higher percentage of clients with co-occurring disorders (mental health and substance abuse problems) among clients reporting meth abuse. From our perspective, there appear to be significant mental health consequences to meth abuse, implications that are different from those associated with abuse of other substances such as cocaine or heroin.

Westcare's therapeutic community methodology of treatment attempts to address the entirety of social, psychological, cognitive, and behavioral factors in combating meth abuse and addiction. Traditionally, therapeutic communities have been community based, long-term residential substance abuse treatment providers. In recent years, TCs have expanded their range of services, providing outpatient, prevention, education, family therapy, transitional housing, in-prison treatment, vocational training, medical services, and case management.

During my introduction, I mentioned my role as President of TCA. TCA has submitted a separate written statement to the Subcommittee to be included in the Hearing Record. I would encourage Subcommittee Members and staff to review that testimony. The TCA testimony outlines the principles on which therapeutic communities operate, and the testimony discusses specifically how the therapeutic community treatment model is applicable to treating individuals abusing or addicted to meth.

Before I close, I would like to comment on the important programs funded by the federal agencies represented at this hearing. SAMHSA and CSAT operate the Substance Abuse Prevention and Treatment Block Grant (SAPT), which is the single largest funding stream for treatment programs for addicted individuals. SAMHSA and CSAT also operate Programs of Regional and National Significance. Funding provided through this block grant and through these discretionary programs has been effective in developing and improving treatment for special populations and in targeting emerging national and regional needs. Without these funds, the treatment community could not begin to effectively develop the necessary infrastructure to treat meth abusers and addicts.

NIDA and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) provide invaluable clinical evidence to drug prevention and treatment providers, improving efforts to combat the consequences of drug abuse. Although we have much more to learn about treatment best practices, research conducted by NIDA and NIAAA has contributed significantly to improving treatment services.

On behalf of WestCare and my colleagues at TCA, please know that we are grateful for the strong support this Subcommittee has provided these two agencies in recent years. Substance abuse treatment can work to reduce meth abuse and addiction. Interdiction and enforcement are an important part of the solution, but effective treatment is essential to the solution.

In conclusion, I commend the Subcommittee for conducting this hearing, and I appreciate having been provided the opportunity to testify. I would be pleased to answer any questions.

Senator HARKIN. Thank you very much, Mr. Steinberg.

Thank you all for being here. We have a period of time here in which we can enter into kind of a generalized discussion.

First of all, Ms. Sickels, I want to give you this to read. I was on an airplane once and I was reading the New York Times Sunday Magazine and it was a story called "My Addicted Son" by David Schiff. It was February 6 of this year. Of course, he is a novelist and so his writing really grabs you. I do not know if you have seen this, but I think you would appreciate it. In fact, I am going to ask that this be made a part of the record also, because it really lays out what happened to his kid. It just almost really parallels your story.

[The information follows:]

[From The New York Times, February 6, 2005]

MY ADDICTED SON

(By David Sheff)

A father's story.

One windy day in May 2002, my young children, Jasper and Daisy, who were 8 and 5, spent the morning cutting, pasting and coloring notes and welcome banners

for their brother's homecoming. They had not seen Nick, who was arriving from college for the summer, in six months. In the afternoon, we all drove to the airport to pick him up.

At home in Inverness, north of San Francisco, Nick, who was then 19, lugged his duffel bag and backpack into his old bedroom. He unpacked and emerged with his arms loaded with gifts. After dinner, he put the kids to bed, reading to them from "The Witches," by Roald Dahl. We heard his voice—voices—from the next room: the boy narrator, all wonder and earnestness; wry and creaky Grandma; and the shrieking, haggy Grand High Witch. The performance was irresistible, and the children were riveted. Nick was a playful and affectionate big brother to Jasper and Daisy—when he wasn't robbing them.

Late that night, I heard the creaking of bending tree branches. I also heard Nick padding along the hallway, making tea in the kitchen, quietly strumming his guitar and playing Tom Waits, Bjork and Bollywood soundtracks. I worried about his insomnia, but pushed away my suspicions, instead reminding myself how far he had come since the previous school year, when he dropped out of Berkeley. This time, he had gone east to college and had made it through his freshman year. Given what we had been through, this felt miraculous. As far as we knew, he was coming up on his 150th day without methamphetamine.

In the morning, Nick, in flannel pajama bottoms and a fraying woolen sweater, shuffled into the kitchen. His skin was rice-papery and gaunt, and his hair was like a field, with smashed-down sienna patches and sticking-up yellowed clumps, a disaster left over from when he tried to bleach it. Lacking the funds for Lady Clairol, his brilliant idea was to soak his head in a bowl of Clorox.

Nick hovered over the kitchen counter, fussing with the stove-top espresso maker, filling it with water and coffee and setting it on a flame, and then sat down to a bowl of cereal with Jasper and Daisy. I stared hard at him. The giveaway was his body, vibrating like an idling car. His jaw gyrated and his eyes were darting opals. He made plans with the kids for after school and gave them hugs. When they were gone, I said, "I know you're using again."

He glared at me: "What are you talking about? I'm not." His eyes fixed onto the floor.

"Then you won't mind being drug-tested."

"Whatever."

When Nick next emerged from his bedroom, head down, his backpack was slung over his back, and he held his electric guitar by the neck. He left the house, slamming the door behind him. Late that afternoon, Jasper and Daisy burst in, dashing from room to room, before finally stopping and, looking up at me, asking, "Where's Nick?"

Nick now claims that he was searching for methamphetamine for his entire life, and when he tried it for the first time, as he says, "That was that." It would have been no easier to see him strung out on heroin or cocaine, but as every parent of a methamphetamine addict comes to learn, this drug has a unique, horrific quality. In an interview, Stephan Jenkins, the singer in the band Third Eye Blind, said that methamphetamine makes you feel "bright and shiny." It also makes you paranoid, incoherent and both destructive and pathetically and relentlessly self-destructive. Then you will do unconscionable things in order to feel bright and shiny again. Nick had always been a sensitive, sagacious, joyful and exceptionally bright child, but on meth he became unrecognizable.

Nick's mother and I were attentive, probably overly attentive—part of the first wave of parents obsessed with our children in a self-conscious way. (Before us, people had kids. We parented.) Nick spent his first years on walks in his stroller and Snuggli, playing in Berkeley parks and baby gyms and visiting zoos and aquariums.

His mother and I divorced when he was 4. No child benefits from the bitterness and savagery of a divorce like ours. Like fallout from a dirty bomb, the collateral damage is widespread and enduring. Nick was hit hard. The effects lingered well after his mother and I settled on a joint-custody arrangement and, later, after we both remarried.

As a kindergartner, when he wore tights, the other school children teased him: "Only girls wear tights." Nick responded: "Uh, uh, Superman wears tights." I was proud of his self-assuredness and individuality. Nick readily rebelled against conventional habit, mores and taste. Still, he could be susceptible to peer pressure. During the brief celebrity of Kris Kross, he wore backward clothes. At 11, he was hidden inside grungy flannel, shuffling around in Doc Martens. Hennaed bangs hung Cobain-like over his eyes.

Throughout his youth, I talked to Nick "early and often" about drugs in ways now prescribed by the Partnership for a Drug-Free America. I watched for one organization's early warning signs of teenage alcoholism and drug abuse. (No. 15: "Does your

child volunteer to clean up after adult cocktail parties, but neglect other chores?") Indeed, when he was 12, I discovered a vial of marijuana in his backpack. I met with his teacher, who said: "It's normal. Most kids try it." Nick said that it was a mistake—he had been influenced by a couple of thuggish boys at his new school—and he promised that he would not use it again.

In his early teens, Nick was into the hippest music and then grew bored with it. By the time his favorite artists, from Guns N' Roses to Beck to Eminem, had a hit record, Nick had discarded them in favor of the retro, the obscure, the ultra contemporary or plain bizarre, an eclectic list that included Coltrane, polka, the soundtrack from "The Umbrellas of Cherbourg" and, for a memorable period, samba, to which he would cha-cha through the living room. His heroes, including Holden Caulfield and Atticus Finch, were replaced by an assortment of misanthropes, addicts, drunks, depressives and suicides, role models like Burroughs, Bukowski, Cobain, Hemingway and Basquiat. Other children watched Disney and "Star Wars," but Nick preferred Scorsese, David Lynch and Godard.

At 14, when he was suspended from high school for a day for buying pot on campus, Nick and my wife and I met with the freshman dean. "We view this as a mistake and an opportunity," he explained. Nick was forced to undergo a day at a drug-and-alcohol program but was given a second chance. A teacher took Nick under his wing, encouraging his interest in marine biology. He surfed with him and persuaded him to join the swimming and water-polo teams. Nick had two productive and, as far as I know, drug-free years. He showed promise as a student actor, artist and writer. For a series of columns in the school newspaper, he won the Ernest Hemingway Writing Award for high-school journalists, and he published a column in *Newsweek*.

After his junior year, Nick attended a summer program in French at the American University of Paris. I now know that he spent most of his time emulating some of his drunken heroes, though he forgot the writing and painting part. His souvenir of his Parisian summer was an ulcer. What child has an ulcer at 16? Back at high school for his senior year, he was still an honor student, with a nearly perfect grade-point average. Even as he applied to and was accepted at a long list of colleges, one senior-class dean told me, half in jest, that Nick set a school record for tardiness and cutting classes. My wife and I consulted a therapist, and a school counselor reassured us: "You're describing an adolescent. Nick's candor, unusual especially in boys, is a good sign. Keep talking it out with him, and he'll get through this."

His high-school graduation ceremony was held outdoors on the athletic field. With his hair freshly buzzed, Nick marched forward and accepted his diploma from the school head, kissing her cheek. He seemed elated. Maybe everything would be all right after all. Afterward, we invited his friends over for a barbecue. Later we learned that a boy in jeans and a sport coat had scored some celebratory sensimilla. Nick and his friends left our house for a grad-night bash that was held at a local recreation center, where he tried ecstasy for the first time.

A few weeks later, my wife planned to take the kids to the beach. The fog had lifted, and I was with them in the driveway, helping to pack the car. Two county sheriff's patrol cars pulled up. When a pair of uniformed officers approached, I thought they needed directions, but they walked past me and headed for Nick. They handcuffed his wrists behind his back, pushed him into the back seat of one of the squad cars and drove away. Jasper, then 7, was the only one of us who responded appropriately. He wailed, inconsolable for an hour. The arrest was a result of Nick's failure to appear in court after being cited for marijuana possession, an infraction he "forgot" to tell me about. Still, I bailed him out, confident that the arrest would teach him a lesson. Any fear or remorse he felt was short-lived, however, blotted out by a new drug—crystal methamphetamine.

When I was a child, my parents implored me to stay away from drugs. I dismissed them, because they didn't know what they were talking about. They were—still are—teetotalers. I, on the other hand, knew about drugs, including methamphetamine. On a Berkeley evening in the early 1970's, my college roommate arrived home, yanked the thrift-shop mirror off the wall and set it upon a coffee table. He unfolded an origami packet and poured out its contents onto the mirror: a mound of crystalline powder. From his wallet he produced a single-edge razor, with which he chipped at the crystals, the steel tapping rhythmically on the glass. While arranging the powder in four parallel rails, he explained that Michael the Mechanic, our drug dealer, had been out of cocaine. In its place, he purchased crystal methamphetamine.

I snorted the lines through a rolled-up dollar bill. The chemical burned my nasal passages, and my eyes watered. Whether the drug is sniffed, smoked, swallowed or injected, the body quickly absorbs methamphetamine. Once it reaches the circulatory system, it's a near-instant flume ride to the central nervous system. When

it reached mine, I heard cacophonous music like a calliope and felt as if Roman candles had been lighted inside my skull. Methamphetamine triggers the brain's neurotransmitters, particularly dopamine, which spray like bullets from a gangster's Tommy gun. The drug destroys the receptors and as a result may, over time, permanently reduce dopamine levels, sometimes leading to symptoms normally associated with Parkinson's disease like tremors and muscle twitches. Meth increases the heart rate and blood pressure and can cause irreversible damage to blood vessels in the brain, which can lead to strokes. It can also cause arrhythmia and cardiovascular collapse, possibly leading to death. But I felt fantastic—supremely confident, euphoric.

After methamphetamine triggers the release of neurotransmitters, it blocks their reuptake back into their storage pouches, much as cocaine and other stimulants do. Unlike cocaine, however, meth also blocks the enzymes that help to break down invasive drugs, so the released chemicals float freely until they wear off. Methamphetamine remains active for 10 to 12 hours, compared with 45 minutes for cocaine. When the dawn began to seep through the cracked window blinds, I felt bleak, depleted and agitated. I went to bed and eventually slept for a full day, blowing off school.

I never touched methamphetamine again, but my roommate returned again and again to Michael the Mechanic's, and his meth run lasted for two weeks. Not long afterward, he moved away, and I lost touch with him. I later learned that after college, his life was defined by his drug abuse. There were voluntary and court-ordered rehabs, car crashes, a house that went up in flames when he fell asleep with a burning cigarette in his mouth, ambulance rides to emergency rooms after overdoses and accidents and incarcerations, both in hospitals and jails. He died on the eve of his 40th birthday.

When I told Nick cautionary stories like this and warned him about crystal, I thought that I might have some credibility. I have heard drug counselors tell parents of my generation to lie to our children about our past drug use. Famous athletes show up at school assemblies or on television and tell kids, "Man, don't do this stuff, I almost died," and yet there they stand, diamonds, gold, multimillion-dollar salaries and fame. The words: I barely survived. The message: I survived, thrived and you can, too. Kids see that their parents turned out all right in spite of the drugs. So maybe I should have lied, and maybe I'll try lying to Daisy and Jasper. Nick, however, knew the truth. I don't know how much it mattered. Part of me feels solely responsible—if only his mother and I had stayed together; if only she and I had lived in the same city after the divorce and had a joint-custody arrangement that was easier on him; if only I had set stricter limits; if only I had been more consistent. And yet I also sense that Nick's course was determined by his first puff of pot and sip of wine and sealed with the first hit of speed the summer before he began college.

When Nick's therapist said that college would straighten him out, I wanted to believe him. When change takes place gradually, it's difficult to comprehend its meaning. At what point is a child no longer experimenting, no longer a typical teenager, no longer going through a phase or a rite of passage? I am astounded—no, appalled—by my ability to deceive myself into believing that everything would turn out all right in spite of mounting evidence to the contrary.

At the University of California at Berkeley, Nick almost immediately began dealing to pay for his escalating meth habit. After three months, he dropped out, claiming that he had to pull himself together. I encouraged him to check into a drug-rehabilitation facility, but he refused. (He was over 18, and I could not commit him.) He disappeared. When he finally called after a week, his voice trembled. It nonetheless brought a wave of relief—he was alive. I drove to meet him in a weedy and garbage-strewn alleyway in San Rafael. My son, the svelte and muscular swimmer, water-polo player and surfer with an ebullient smile, was bruised, sallow, skin and bone, and his eyes were vacant black holes. Ill and rambling, he spent the next three days curled up in bed.

I was bombarded with advice, much of it contradictory. I was advised to kick him out. I was advised not to let him out of my sight. One counselor warned, "Don't come down too hard on him or his drug use will just go underground." One mother recommended a lockup school in Mexico, where she sent her daughter to live for two years. A police officer told me that I should send Nick to a boot camp where children, roused and shackled in the middle of the night, are taken by force.

His mother and I decided that we had to do everything possible to get Nick into a drug-rehabilitation program, so we researched them, calling recommended facilities, inquiring about their success rates for treating meth addicts. These conversations provided my initial glimpse of what must be the most chaotic, flailing field of health care in America. I was quoted success rates in a range from 20 to 85 percent.

An admitting nurse at a Northern California hospital insisted: "The true number for meth addicts is in the single digits. Anyone who promises more is lying." But what else could we try? I used what was left of my waning influence—the threat of kicking him out of the house and withdrawing all of my financial support—to get him to commit himself into the Ohlhoff Recovery Program in San Francisco. It is a well-respected program, recommended by many of the experts in the Bay Area. A friend of a friend told me that the program turned around the life of her heroin-addicted son.

Nick trembled when I dropped him off. Driving home afterward, I felt as if I would collapse from more emotion than I could handle. Incongruously, I felt as if I had betrayed him, though I did take some small consolation in the fact that I knew where he was; for the first time in a while, I slept through the night.

For their initial week, patients were forbidden to use the telephone, but Nick managed to call, begging to come home. When I refused, he slammed down the receiver. His counselor reported that he was surly, depressed and belligerent, threatening to run away. But he made it through the first week, which consisted of morning walks, lectures, individual and group sessions with counselors, 12-step-program meetings and meditation and acupuncture. Family groups were added in the second week. My wife and I, other visiting parents and spouses or partners, along with our addicts, sat in worn couches and folding chairs, and a grandmotherly, whiskey-voiced (though sober for 20 years) counselor led us in conversation.

"Tell your parents what it means that they're here with you, Nick," she said.

"Whatever. It's fine."

By the fourth and final week, he seemed open and apologetic, claiming to be determined to take responsibility for the mess he'd made of his life. He said that he knew that he needed more time in treatment, and so we agreed to his request to move into the transitional residential program. He did, and then three days later he bolted. At some point, parents may become inured to a child's self-destruction, but I never did. I called the police and hospital emergency rooms. I didn't hear anything for a week. When he finally called, I told him that he had two choices as far as I was concerned: another try at rehab or the streets. He maintained that it was unnecessary—he would stop on his own—but I told him that it wasn't negotiable. He listlessly agreed to try again.

I called another recommended program, this one at the St. Helena Hospital Center for Behavioral Health, improbably located in the Napa Valley wine country. Many families drain every penny, mortgaging their homes and bankrupting their college funds and retirement accounts, trying successive drug-rehab programs. My insurance and his mother's paid most of the costs of these programs. Without this coverage, I'm not sure what we would have done. By then I was no longer sanguine about rehabilitation, but in spite of our experience and the questionable success rates, there seemed to be nothing more effective for meth addiction.

Patients in the St. Helena program keep journals. In Nick's, he wrote one day: "How the hell did I get here? It doesn't seem that long ago that I was on the waterpolo team. I was an editor of the school newspaper, acting in the spring play, obsessing about which girls I liked, talking Marx and Dostoevsky with my classmates. The kids in my class will be starting their junior years of college. This isn't so much sad as baffling. It all seemed so positive and harmless, until it wasn't."

By the time he completed the fourth week, Nick once again seemed determined to stay away from drugs. He applied to a number of small liberal-arts schools on the East Coast. His transcripts were still good enough for him to be accepted at the colleges to which he applied, and he selected Hampshire, located in a former apple orchard in Western Massachusetts.

In August, my wife and I flew east with him for freshman orientation. At the welcoming picnic, Karen and I surveyed the incoming freshmen for potential drug dealers. We probably would have seen this on most campuses, but we were not reassured when we noticed a number of students wearing T-shirts decorated with marijuana leaves, portraits of Bob Marley smoking a spliff and logos for the Church of LSD.

In spite of his protestations and maybe (though I'm not sure) his good intentions and in spite of his room in substance-free housing, Nick didn't stand a chance. He tried for a few weeks. When he stopped returning my phone calls, I assumed that he had relapsed. I asked a friend, who was visiting Amherst, to stop by to check on him. He found Nick holed up in his room. He was obviously high. I later learned that not only had Nick relapsed, but he had supplemented methamphetamine with heroin and morphine, because, he explained, at the time meth was scarce in Western Massachusetts. "Everyone told me not to try it, you know?" Nick later said about heroin. "They were like, 'Whatever you do, stay away from dope.' I wish I'd

got the same warning about meth. By the time I got around to doing heroin, I really didn't see what the big deal was."

I prepared to follow through on my threat and stop paying his tuition unless he returned to rehab, but I called a health counselor, who advised patience, saying that often "relapse is part of recovery." A few days later, Nick called and told me that he would stop using. He went to 12-step program meetings and, he claimed, suffered the detox and early meth withdrawal that is characterized by insuperable depression and acute anxiety—a drawn-out agony. He kept in close touch and got through the year, doing well in some writing and history classes, newly in love with a girl who drove him to Narcotics Anonymous meetings and eager to see Jasper and Daisy. His homecoming was marked by trepidation, but also promise, which is why it was so devastating when we discovered the truth.

When Nick left, I sunk into a wretched and sickeningly familiar malaise, alternating with a debilitating panic. One morning, Jasper came into the kitchen, holding a satin box, a gift from a friend upon his return from China, in which he kept his savings of \$8. Jasper looked perplexed. "I think Nick took my money," he said. How do you explain to an 8-year-old why his beloved big brother steals from him?

After a week, I succumbed to my desperation and went to try to find him. I drove over the Golden Gate Bridge from Marin County to San Francisco, to the Haight, where I knew he often hung out. The neighborhood, in spite of some gentrification, retains its 1960's-era funkiness. Kids—tattooed, pierced, track-marked, stoned—loiter in doorways. Of course I didn't find him.

After another few weeks, he called, collect: "Hey, Pop, it's me." I asked if he would meet me. No matter how unrealistic, I retained a sliver of hope that I could get through to him. That's not quite accurate. I knew I couldn't, but at least I could put my fingertips on his cheek.

For our meeting, Nick chose Steps of Rome, a cafe on Columbus Avenue in North Beach, our neighborhood after his mother and I divorced. In those days, Nick played in Washington Square Park opposite the Cathedral of Saints Peter and Paul, down the hill from our Russian Hill flat. We would eat early dinner at Vanessi's, an Italian restaurant now gone. The waiters, when they saw Nick, then towheaded, with a gap between his front teeth, would lift him up and set him on telephone books stacked on a stool at the counter. Nick was little enough so that after dinner, when he got sleepy, I could carry him home, his tiny arms wrapped around my neck.

Since reason and love, the forces I had come to rely on, had betrayed me, I was in uncharted territory as I sat at a corner table nervously waiting for him. Steps of Rome was deserted, other than a couple of waiters folding napkins at the bar. I ordered coffee, racking my brain for the one thing I could say that I hadn't thought of that could get through to him. Drug-and-alcohol counselors, most of them former addicts, tell fathers like me it's not our fault. They preach "the Three C's": "You didn't cause it, you can't control it, and you can't cure it." But who among us doesn't believe that we could have done something differently that would have helped? "It hurts so bad to think I cannot save him, protect him, keep him out of harm's way, shield him from pain," wrote Thomas Lynch, the undertaker, poet and essayist, about his son, a drug addict and an alcoholic. "What good are fathers if not for these things?" I waited until it was more than half an hour past our meeting time, recognizing the mounting, suffocating worry and also the bitterness and anger. I had been waiting for Nick for years. At night, past his curfew, I waited for the car's grinding engine when it pulled into the driveway and went silent, the slamming door, footsteps and the front door opening with a click, despite his attempt at stealth. Our dog would yelp a halfhearted bark. When Nick was late, I always assumed catastrophe.

After 45 minutes waiting at Steps of Rome, I decided that he wasn't coming—what had I expected?—and left the cafe. Still, I walked around the block, returned again, peered into the cafe and then trudged around the block again. Another half-hour later, I was ready to go home, really, maybe, when I saw him. Walking down the street, looking down, his gangly arms limp at his sides, he looked more than ever like a ghostly, hollow Egon Schiele self-portrait, debauched and emaciated. I returned his hug, my arms wrapping around his vaporous spine, and kissed his cheek. We embraced like that and sat down at a table by the window. He couldn't look me in the eye. No apologies for being late. He asked how I was, how were the little kids? He folded and unfolded a soda straw and rocked anxiously in his chair; his fingers trembled, and he clenched his jaw and ground his teeth. He pre-empted any questions, saying: "I'm doing. Great. I'm doing what I need to be doing, being responsible for myself for the first time in my life." I asked if he was ready to kick, to return to the living, to which he said, "Don't start." When I said that Jasper and Daisy missed him, he cut me off. "I can't deal with that. Don't guilt-trip me." Nick drank down his coffee, held onto his stomach. I watched him rise and leave.

Through Nick's drug addiction, I learned that parents can bear almost anything. Every time we reach a point where we feel as if we can't bear any more, we do. Things had descended in a way that I never could have imagined, and I shocked myself with my ability to rationalize and tolerate things that were once unthinkable. He's just experimenting. Going through a stage. It's only marijuana. He gets high only on weekends. At least he's not using heroin. He would never resort to needles. At least he's alive.

A fortnight later, Nick wrote an e-mail message to his mother and asked for help. After they talked, he agreed to meet with a friend of our family who took him to her home in upstate New York, where he could detox. He slept for 20 or more hours a day for a week and began to work with a therapist who specialized in drug addiction. After six or so weeks, he seemed stronger and somewhat less desolate. His mother helped him move into an apartment in Brooklyn, and he got a job. When he finally called, he told me that he would never again use methamphetamine, though he made no such vows about marijuana and alcohol. With this news, I braced myself for the next disaster. A new U.C.L.A. study confirms that I had reason to expect one: recovering meth addicts who stay off alcohol and marijuana are significantly less likely to relapse.

Two or so months later, the phone rang at 5 on a Sunday morning. Every parent of a drug-addicted child recoils at a ringing telephone at that hour. I was informed that Nick was in a hospital emergency room in Brooklyn after an overdose. He was in critical condition and on life support.

After two hours, the doctor called to tell me that his vital signs had leveled off. Still later, he called to say that Nick was no longer on the critical list. From his hospital bed, when he was coherent enough to talk, Nick sounded desperate. He asked to go into another program, said it was his only chance.

So without reluctance this time, Nick returned to rehab. After six or so months, he moved to Santa Monica near his mother. He lived in a sober-living home, attended meetings regularly and began working with a sponsor. He had several jobs, including one at a drug-and-alcohol rehabilitation program in Malibu. Last April, after celebrating his second year sober, he relapsed again, disappearing for two weeks. His sponsor, who had become a close friend of Nick's, assured me: "Nick won't stay out long. He's not having any fun." Of course I hoped that he was right, but I was no less worried than I was other times he had disappeared—worried that he could overdose or otherwise cause irreparable damage.

But he didn't. He returned and withdrew on his own, helped by his sponsor and other friends. He was ashamed—mortified—that he slipped. He redoubled his efforts. Ten months later, of course, I am relieved (once again) and hopeful (once again). Nick is working and writing a children's book and articles and movie reviews for an online magazine. He is biking and swimming. He seems emphatically committed to his sobriety, but I have learned to check my optimism.

We recently visited Nick. His eyes were clear, his body strong and his laugh easy and honest. At night, he read to Jasper and Daisy, picking up "The Witches" where he left off nearly three years before. Soon thereafter, a letter arrived for Jasper, who is now 11. Nick wrote: "I'm looking for a way to say I'm sorry more than with just the meaninglessness of those two words. I also know that this money can never replace all that I stole from you in terms of the fear and worry and craziness that I brought to your young life. The truth is, I don't know how to say I'm sorry. I love you, but that has never changed. I care about you, but I always have. I'm proud of you, but none of that makes it any better. I guess what I can offer you is this: As you're growing up, whenever you need me—to talk or just whatever—I'll be able to be there for you now. That is something that I could never promise you before. I will be here for you. I will live, and build a life, and be someone that you can depend on. I hope that means more than this stupid note and these eight dollar bills."

Senator HARKIN. When I heard about your story, I remembered reading this just a couple months ago. So I will give it to you read when you leave here.

Mr. Curie, again without sounding too parochial, why has meth become such a big problem in rural States? I mean, there was always a little bit of heroin—again, Vicki, you can chime in—some cocaine, marijuana yes, but nothing like meth, nothing like meth.

Mr. CURIE. I think it is the nature of how meth is created. It is not reliant on a specific drug trade. The ingredients are available in general stores in local communities. It can be produced in make-

shift laboratories, actually on a kitchen stove. What we have been finding, that once it is produced in that sort of local, almost intimate way, that when people begin using it there is a network of friends and even family who are not going to be open about it and it becomes part of the social mores of a particular area and group.

So it is a tougher illicit drug to address. So the low cost, the availability and the ease of manufacturing and then the mores seem to be the primary factors that just almost are like the perfect storm to make this a difficult drug to address. And the rural areas have been ripe for that.

I think also the rural areas have had much more of a challenge around treatment and getting at that issue, because we have found that many of the approaches in treatment that were successful with cocaine are initially successful in helping to address meth. The urban areas had a major focus on cocaine and rural areas really did not have that problem, so they are somewhat starting from scratch in addressing this kind of issue in one sense.

Plus it is always—growing up on a farm in Indiana and being a director of a center in rural Ohio, I also know firsthand how difficult it is to get treatment resources focused on the rural areas.

So I think those, all those combined, contribute to this issue.

Senator HARKIN. I went on the web site yesterday. My staff told me how to find this. You can actually go on a web site and find how to make meth.

Mr. CURIE. Absolutely.

Senator HARKIN. All the ingredients are listed there step by step how to do it.

Mr. CURIE. It is very available. It is right there on the Internet. You could go right now and you can find several kinds of recipes. It is just mind boggling how accessible that is, and then how effective it is in terms of creating this drug. Then we heard from Ms. Sickels and also from Nora and the science and then the actual results, just the profound devastating impact this drug has on the human system, even compared to other illicit drugs that we know for years have been dangerous.

Ms. SICKELS. Senator Harkin.

Senator HARKIN. Yes, Vicki, just chime in.

Ms. SICKELS. Can I add a line with this question, because I would like to speak to this question, too. I think all that he said is true, but part of it has to do with the way meth acts on your brain, the way that it lifts you up above where you are at. So if you are in a dead-end job or an unsatisfying relationship or even I have people who come in and talk about they use because they have back pain or they relapse because they have been sick—it lifts you up above whatever emotional pain or physical pain or boredom. You kind of do not care.

Then it is a vicious circle, because if you are in kind of a bad financial situation then you use, you do not really care. Then you lose your job, then you start to lose everything. As long as people stay high, they will let their electricity be shut off and their water be shut off, really living in horrible conditions, but as long as they have got meth they can kind of raise themselves above that and focus on their projects and it kind of does not matter.

Senator HARKIN. Amazing. Again, as long as we are on this line, how do young people, high school students—is it a progression? Is it like smoking and then drinking alcoholic beverages and then maybe marijuana? Is it a progression to meth?

Ms. SICKELS. That is kind of the way it worked with other drugs. I am not sure it is like that with meth.

Senator HARKIN. I am going to have everyone chime in on this.

Mr. CURIE. I was going to say, Nora can definitely speak to that in terms of the science. But I agree with Vicki. What we are seeing is what you just described as a normal progression you see with overall drug abuse and addictive behavior. For example, we know that youth who drink alcohol at the age of 15 or younger are over four times more likely to have an addictive disorder.

But because of the nature of this particular chemical and its highly addictive nature—and Nora is the most qualified to describe that in depth—it poses an overwhelming challenge in addressing the situation.

Dr. VOLKOW. I think in general basically what we see is the progression from alcohol, cigarette smoking, marijuana, to other drugs. But what you have here is what is more accessible to kids, so when kids have access to tablets of methamphetamine actually readily available then that puts them in a very, very dangerous pathway, because not all of the drugs of abuse are the same vis a vis their addictiveness, and methamphetamine scores up on the top because of this direct effect of producing a massive, massive increase in dopamine.

When dopamine is increased in your brain, what the brain is telling you is this is salient, this is extremely important for survival. That is what the nature message of dopamine is. So all of a sudden your brain is acting and it says: This is incredibly salient. That is the way that nature ensures for us to do things that are important for survival. So when you are hungry and you see food, dopamine gets activated and that ensures that you will do the behavior to engage in the food—extremely important.

So you are taking this drug that is telling your brain much more than any natural reinforcer, this is salient. So what happens is that these kids, they feel that they can do anything. But the problem is that then everyday things pale in comparison. So there is nothing that can compete with the drug. There is nothing that is going to make you feel as excited and as engaged as methamphetamine will.

So the kid learns this and then the next time that they see it of course they are driven to it. So the drug is basically usurping the normal mechanisms by which nature ensures that we will repeat that given behavior, except that in this case the given behavior is take the drug. In others it is that you learn to get food, that you learn to get a partner, that you learn to take care of children. Dopamine is what actually motivates all of these behaviors, and the drug is directly doing this at what we call a supra, supra physiological level that is 5 to 10 times higher than normally naturally reinforcers.

That is why when a kid gets exposed to it it can be so dangerous. You have a highly, highly addictive drug.

Mr. STEINBERG. I was just going to say that the kids do not see it as being an addictive problem when they are first getting into it. They talk about it with each other. They do not see it as a long-term problem.

Senator HARKIN. Yes, they are young and they are strong and they can get over it.

Mr. STEINBERG. They are young and they are strong. They have that superman mentality and everything is fine and they are going to be just fine with it. It is just becoming so acceptable. It is used at rave parties, so all these different issues. They do not see it as an addictive issue.

I guess that is a concern and a message, a prevention message on a national basis, that probably ought to be looked at more. But it is a very serious, serious issue and they are not seeing it as a serious issue.

I think some of the problems we get into, Senator, is that a lot of times people think that if you are not injecting, needle use, it is probably not addicting. I think we have learned over the years. We used to have that in Vietnam. We were talking about that earlier. People used to smoke just heroin in Vietnam and they thought, well, at least they do not inject it. They did not realize how pure it was and how quickly they were becoming addicted. It was an issue and a real serious issue.

These kids now are not maybe seeing it because maybe they are not injecting it on the first bounce.

Senator HARKIN. How do most young people start on meth? Smoking?

Ms. SICKELS. Snorting it, probably, is my guess.

Senator HARKIN. Snorting it, like cocaine or something like that?

Ms. SICKELS. Right, snorting it or eating it probably would be the first, yes.

Here is another thing. I talked just briefly about the multigenerational kind of thing that is going on, but if parents have alcohol or even marijuana, I do not know, they probably kind of keep that separate. But a parent on meth is so disorganized that that is obvious to a kid. I watched more than one person that I knew as I was going through it start to use meth with their teenage kids. It is a learned thing that is going on in their household.

Mr. CURIE. To dovetail on that, what Vicki is talking about are the serious consequences beyond the addictive nature and what it does to the body, the social consequences. That is I think a classic example of what it does to the family.

Also, we probably cannot calculate the cost of this drug. For example, I was aware ONDCP paid a visit to Vanderbilt University Hospital in Tennessee and out of the 20 victims in their burn unit 7 were due to methamphetamine lab accidents. That is \$10,000 a day for a burn client, plus the devastation to that person.

So when we are really trying to dig into the consequences of this, we probably do not even have a way of calculating that, but it is costing us dearly in a lot of ways.

Senator HARKIN. Dr. Volkow, back to the question that I kind of raised with Ms. Sickels. That is, it seems that even after you quit taking meth there are some residual effects that last for some time.

Dr. VOLKOW. Yes, indeed. As a researcher, I was very interested in this question, because if you look at it from the perspective of studies and you say, well, which is the drug that is most toxic to the brain, methamphetamine scores probably on the top. In animals, a few exposures of two or three doses can produce destruction actually in some instances of the dopamine cells, which is of course what causes Parkinson's.

So I was very interested in knowing to what extent people abusing methamphetamine are putting themselves at risk of a devastating disease such as Parkinson's. So I was intrigued by that, and we did document it. We found that with Parkinson's, the dopamine cells are dead. Patients with methamphetamine addiction are intermediate. But the concept, though, is that because they are intermediate they do not still have the symptoms classically of Parkinson's. But the question was are they at greater risk later on in their lives of becoming like Parkinson's patients? This relates to your question, does the brain recover?

So we have been following these patients that actually are able to stay clean. Some when they receive treatment, as we say, treatment works and some patients do stay clean. To our surprise and the surprise of the field, we observed there was recovery. People did not believe it because they had assumed that the damage would be like Parkinson's disease.

Recovery takes time.

For example, this chart—see figure 3 in my prepared statement—is a person that has been tested 1 month and you see that it decreases here, the damage there. But it recovers at 24 months. It takes a long time, 2 years, but you see they recover in this particular individual.

In animal studies done in non-human primates, in monkeys, they have shown exactly the same thing, that if you wait long enough—12, 24 months—you can actually recover some of the damage, which is very, very good news, and that is the way that I put it forth.

Senator HARKIN. But is there a point where if you have been a meth abuser for a long time, is there a point where you just do not recover?

Dr. VOLKOW. That is an absolutely important question. In animal studies, yes, to extent to which an animal can recover is dependent on the dose and the time that that animal has been exposed to the drug. So it is absolutely correct. There is a point of no return. If you produce damage that is long enough, then in animals they do not see the recovery.

So your point is very well taken. It is actually a message that is very, very relevant to put forward. That is why I say it highlights the importance of treating such that the person can have a chance of recovery.

Senator HARKIN. Thank you.

I do not have a lot of time left. Can we talk a little about prevention. I mean, I need to have you just tell me about your best ideas. Ms. Sickels, what are the best ways to prevent this? We know about treatment and we know that it is going to take a longer term than what we have had, so we have to have longer term treatment modalities to get them through.

But how do we prevent this? Any thoughts on that?

Dr. VOLKOW. I think that actually you are absolutely putting your finger on the fact that the main way of dealing with the issue is prevention. We have made prevention our number one priority exactly for the reason that is driving your question.

Now, how do you prevent? We know that prevention works. Now, we have a perfect example of one of the most important prevention interventions that we have done in our society, which was cigarette smoking. We did prevention and it has paid off in an incredible way. It has increased the life expectancy of Americans, and the cost to the health care system has gone dramatically down.

Why were we successful? We were successful because we had a systematic approach that involved clear identification of knowledge of the damage, that then affected policy, that then led to involvement of the educational system and industry, that actually ultimately generated the changes in behavior.

Now, in terms of drugs, drugs of abuse and addiction starts in adolescence and, unfortunately, sometimes in children. So our prevention strategies have to target them because they are the most, most vulnerable. That requires again—and this was very clearly stated—involvement of the family, involvement of the school system and the community. I think that that is why Charlie's strategy is so efficient. They are saying: We cannot deal with the problem of drug addiction in isolation. We need to have a systematic involvement that can ultimately incorporate the individual in the community.

I think that SAMHSA has taken a lead in this role, highlighting the importance of a multi-pronged approach in the strategy of prevention and also in treatment.

Mr. CURIE. I appreciate that very much, Nora. We have been working collaboratively together on our Strategic Prevention Framework at SAMHSA. NIDA is helping fund the evaluation process of that program. The systematic approach Nora is talking about we are trying to embody in the Strategic Prevention Framework, in which we are awarding State incentive grants to States. I think we are into 19 States now. Our goal ultimately is to be in every State. States will then embark with local communities on a process of, one, identifying all the prevention dollars that a community gets anyway, and there is a lot of prevention dollars they receive from SAMHSA, from HRSA, from CDC, from Justice, from Education; and then embarking on a process in that community to determine an assessment of the risk factors that exist in that community that contribute to their drug use. It could be the methamphetamine use more specifically in that area.

Once they identify the risk factors, then identify protective factors. And then we have—and again, we have done this in conjunction with NIDA and our other Federal partners—we have developed a National Registry of Effective Prevention Programs. Invest dollars in those prevention programs that we know have a track record in reducing substance abuse and those programs that represent the protective factors to address those risk factors in that community.

For the first time, our goal is to have a baseline to start with in a community. We can evaluate the level of the meth use, for exam-

ple, in that community, and over time see how our interventions of working collaboratively with the schools, with youth development organizations, 4-H, the YMCA's, Scouts, working also with the faith-based community, are having an effect. A community can have a strategy in place that is integrated, where dollars are augmenting each other's efforts, invested in evidence-based programs, and a community can speak as a whole as to what they are doing.

Right now, as you know, as we are all too familiar with, historically we fund prevention programs and all programs, it seems, through silos. The Strategic Prevention Framework is to break the silos down at the local level. We think that is, as Nora just articulated quite well, how we fought tobacco. We need to do the same with methamphetamine and substances in general.

I know I mentioned underage drinking earlier. That is another area and I think there is a connection to that to all of this as well. These things can be addressed with the Strategic Prevention Framework approach.

Senator HARKIN. I am going to go into that a little bit more. First I just want to recognize and welcome some students. [Senator Harkin signing]. I think you are from ISD. My brother graduated from ISD. I am proud to see you here today. Thank you.

That is the Iowa School for the Deaf.

I understand about everything you said, Mr. Curie. But just, I do not know, sometimes you have just got to put some meat on these bones. And how we get this down to the local level, how we get it into schools—you know, we have tried a lot of different things. I do not know how we get to young people.

You have—your son is now how old?

Ms. SICKELS. My son is 14.

Senator HARKIN. 14. Okay, what do you tell him?

Ms. SICKELS. I tell him that other kids are going to experiment with drugs and alcohol and he does not have that luxury, that he has got the gene, and that he needs to wait until he is legal and drink responsibly and let other people experiment and tell them how dangerous it is. I do not know. That is all I can say.

Senator HARKIN. Are we doing a good enough job in our schools in terms of prevention, drug prevention, alcohol prevention? No?

Ms. SICKELS. They have people in, but no, I do not think so. Here is my thing. The high risk kids are the kids who have parents who are using. A lot of times, the people that I work with, most of them dropped out of school in tenth grade. Some of them started using when they were 12 years old. So I do not know. You have to target that prevention maybe, as Dr. Volkow said, earlier, target it earlier or somewhere else besides the schools.

Dr. VOLKOW. I like that you say that you want to actually say have meat on things, and I agree that it could be much better there. For example, you know who is at great risk? Those kids with mental diseases, and this could be learning disability, attention deficit disorder, depression. The school can be alerted about it and also the pediatricians. So involving the medical community in early recognition is a very, very powerful one.

Definitely, we can do much better prevention than what we are doing, and certainly by training teachers to identify those kids that are having trouble learning or that are having trouble to interact

with other kids. That whole issue—if you want to bet, which kid can I predict is at higher risk, just with the knowledge we have now, you are good at betting at that, paying attention to these kids, because they are not doing properly, so they go in to try to get drugs to feel better and that initiates the whole process.

Mr. CURIE. We all need to do more. The schools cannot do it alone. The schools need to be working in conjunction with the community and they need to be setting the tone in the community.

When Nora was talking about the progress we made with tobacco, take a look at the progress we have made with other illicit drugs. What is important is that we have a consistent message and repeat it over and over again, at younger ages, making it part of the norms that this is unacceptable.

I think Vicki articulated well in terms of the parental role. We are finding in our surveys that the stronger the message is from the parent in the home, the less likely the child is to experiment. So it is also empowering parents, educating parents, giving them the tools they need. So we also need to do concerted public education and reach out to parents, who really are up against it themselves in trying to deal with this.

So that is why you also hear us, I think, talk about the multifaceted approach. Yes, we need to have engagement in the schools and we need to continue to have a reinforced message and we need to do more, but it has got to be the community as a whole supporting the schools in that effort, and all those institutions in the community communicating the same message.

The other thing on prevention is, because of the accessibility of the ingredients for methamphetamine, we see States now passing laws to make those ingredients less accessible.

Senator HARKIN. We did in Iowa, yes.

Mr. CURIE. I think that is a major prevention aspect of the meth problem in particular, because if someone can buy sizable amounts of ingredients from your local store and it is not being monitored or flagged or it is easily accessible without there being more of a monitoring, it just makes the drug much more accessible ultimately overall.

So I think we need to take a look at those States that are passing laws, take a look at what impact that is making, and look at potentially other States moving in that direction. Target stores I believe came out this past week indicating they are voluntarily trying to implement those things reflected in State laws nationally, and I think they need to be applauded for doing that.

So I think getting the message out around what we can do to not make this as an accessible drug is another very important part of the prevention effort.

Senator HARKIN. Just again for the record, I want to note that we do not have anyone here from the Education Department. We have had a Safe and Drug-Free Schools and Community State grant program. Again, it is for all substances, not just meth. This year the amount of money that we appropriated for that was \$437 million. The budget that we were sent down zeroed that out, and I just do not think that we ought to be moving in that direction.

Speaking of budgets now, since this is the Appropriations Committee, we have the substance abuse block grant, \$1.8 billion, level

funded. That is for all substances. We have Access to Recovery, the voucher program that you talked about.

Access to Recovery is for all substances. Then we had a Prevent Meth Abuse Program that we had focused on here and we put money into 12 States. It was \$14 million over a couple of years. That is zeroed out.

Again, I have not added all this up. I do not know whether what we are looking at next year is less than what we have done in the past. I do not know. So the totality—so the totality of the funding that we are putting into SAMHSA is going to be less next year than it was last year, I think, but I am not certain.

Mr. CURIE. Yes, sir. For all three centers—mental health, substance abuse, prevention, and treatment—there is about a 1.5 percent overall reduction. As you know, it is a tough budget year, we are trying to prioritize and move ahead.

Under substance abuse treatment, though, we are looking at an overall increase of 7, right around 7 percent. Part of that has to do with again Access to Recovery being a major focus. Where we believe Access to Recovery is critical in addressing the meth issue is that States, particularly those rural States we are talking about where it is a problem, they are encouraged to prioritize what the specific drug problem is in their area.

For example, to point to Tennessee and Wyoming as two States that did receive Access to Recovery awards, they prioritized addressing meth as a major issue. So most of the funding to those States are going toward that problem. We are encouraging other States to examine it.

Around the prevention approach we are taking in SAMHSA, again we are looking at the meth problem to be addressed in the Strategic Prevention Framework because again risk factors are risk factors, and we need to—what I think in the past we have failed to do is to really work and empower States and communities to embark upon identifying what is contributing to their specific problem. That is what we want to fund.

So in our move to systemic change, we are moving away from just addressing some individual drugs in a targeted capacity expansion type of approach. We are trying to learn from what we have found in that and bring systemic change across the country and allow States flexibility then to gear their treatment and prevention efforts around the drugs they see emerging in their areas. Meth obviously is a major priority for those rural States.

Senator HARKIN. But this committee made a decision—I will not just say this committee; I think the House too—made a decision a couple years ago or so to focus money on meth because it was rising so rapidly and, as you say, easy to make, accessibility of the stuff, and I think there was kind of a collective judgment on the part of the committee here that we should really put money in there directed at meth. So that is where we are coming from on this. So we see when that directed money is zeroed out, I think some of us get a little concerned about it.

But what you are saying basically is that the overall thing is up and it is up to States to decide how they want to focus on it?

Mr. CURIE. We will work with States in making informed decisions about what the data is saying and about what they are expe-

riencing, and we take the information we learn from specific approaches, such as the grants structured toward meth, see how we could bring them to systemic change in working with providers.

Senator HARKIN. OK, that's good. That's fair.

Mr. STEINBERG. Senator, on this, from a provider in the field and operating in six States and the trust territory of Virgin Islands, the money we're concerned about on this is a big issue, because as you start to see things zero-out and it gets back out to where we're at and it's reduced—we have an issue that's in our Nation, and we addressed it in the 1980s, we still have an epidemic proportion of problems going on.

Prevention monies are cut. Some of our programs we've had out there have been cut back. This is a terrible situation.

You know, years ago we used to joke about it. There used to be an oil commercial, you know, "Change the oil now—pay me now or pay me later." The cost to what's going to happen by not having the money on the front end for prevention and treatment, and the research that goes into this, is just going to be terrible in the nation later on.

The health care costs are already way up on this issue, and are outside of the norm. The incarceration rates are way up behind this—law enforcement systems.

We have a real problem going on as a nation behind this and I think it's really, I understand, kind of, balanced budgets, but the front end of this major issue on a national basis, to have it cut in any way and not expanded—it should have been expanded, let alone zeroed-out or stopped.

We have people just waiting to get in treatment, and if you don't have treatment on demand—and I just want to address that for a second. People don't always just want to come to treatment just because they feel like they ought to get treatment today. There's certain episodes that come to them and they find and determine that they want to come to treatment. If they can't get a bed or a treatment slot somewhere, they don't necessarily the next day decide they want to go back to treatment.

It's not like cancer where they want to just keep lining up. They go back out, they commit robberies, they do other things to support a habit, or they lie and cheat within their own family to go and keep their habit going, depending on where the money's coming from.

We have a real issue with that and it's not going away. There's been some dips and we've made some progress as a Nation, but it didn't go away. And I think my concern is that when you get a little bit of help somewhere and they go, "Oh, we're on the right direction now. We can cut the funding," that just goes right back out to cause some major problems for us. And I'm real concerned about not having those funds in there for all the disciplines on the front end.

We seem to always come up with more money for law enforcement and interdiction, but, you know, meth's a key thing. We're just opening up a project in rural Kentucky and I didn't even really know where I was going with this. I got invited into the State to work on a program, and a judge there explained something to me.

He says, you know, "I looked at a fishing tackle box different than I used to" because recently he found out it was a portable meth lab.

You know, so you've got issues going everywhere. And my concern is that we can't stop the front end—the funding coming in on this area. If we don't do the prevention and education and the treatment, we're just shooting ourselves in the foot and we're going to be coming back in 5 and 10 years with a much worse problem. And it's a terrible problem now.

Senator HARKIN. I appreciate that. Yes, I'm concerned about getting more of that front end prevention also. And I hope this committee will look hard at that. I'm sure we will.

I think I can speak for Senator Specter. He's also deeply concerned about the up-front funding for the prevention aspects. We've talked about that.

I have to go and I want to close this up.

Ms. SICKELS, I hope you don't mind me asking this question, but I'd just like to know, I mean, do you ever worry about relapsing? Do you ever worry? Or do you feel you're beyond that?

I mean, you're now counseling people, you're working with people. Does it ever come back to you?

Ms. SICKELS. Sometimes I make the statement that you couldn't pay me a million dollars to do that stuff again. But I'm not so foolish as to think that I couldn't be vulnerable again and in the wrong place at the wrong time again. And I know how tricky it is. So I work very hard to keep myself from becoming emotionally vulnerable and away from the places where it might be laid out in front of me.

Senator HARKIN. Does the fact that you were addicted at one time, the patients that you're working with, does it, kind of, help gain trust? Do they respond?

Ms. SICKELS. Without a doubt, it absolutely does.

Senator HARKIN. I can imagine that.

Ms. SICKELS. I know people who have been through treatment who are also on track. They are in school, becoming counselors. I think that it makes a difference to people, especially meth addicts. I do not know that it does to other addicts, but it makes a difference.

Senator HARKIN. Good.

Well, this has been very informative and very instructive, and I appreciate your all being here today. This is a funding aspect that this committee will wrestle with. I might also just add parenthetically also that in some of the research aspects of finding interventions, I know NIH is doing some research, in terms of finding things that would intercept a drug, where if you are a drug addict, where you take something which makes you react so that when you take the drug you get an adverse reaction.

Dr. VOLKOW. That is what we are doing with—we have vaccines to attack cocaine and to attack nicotine.

Senator HARKIN. Yes.

Dr. VOLKOW. Monoclonal antibodies; we have it now for methamphetamines, but they only work if you take a huge dose and you become very sick. We can revert those effects. We do not have a vaccine for—we do not yet have a vaccine for methamphetamine. But at least we can actually reverse that acute intoxication.

It is exactly the line of thinking that you are asking, something that can interfere with the effects of the drug going into the brain.

Senator HARKIN. But that research is ongoing now?

Dr. VOLKOW. Absolutely, yes.

Senator HARKIN. Well, thank you again, Mr. Steinberg, Ms. Sickels, Dr. Volkow, Mr. Curry. Thank you very much for your leadership in this area.

ADDITIONAL SUBMITTED STATEMENTS

We have received additional submitted statements that will be included in the record at this point.

[The statements follow:]

PREPARED STATEMENT OF THE COMMUNITY ANTI-DRUG COALITIONS OF AMERICA

BACKGROUND

Over the last several years, the level of methamphetamine (meth) use in the United States has risen among adults and declined among adolescents. According to the 2003 National Survey on Drug Use and Health, 5.2 percent or 12 million Americans have used meth in their lifetimes.¹

Meth production, use and addiction have adversely impacted many American communities. Meth can be produced in small, clandestine labs, whose toxicity harm children and poses significant risks to law enforcement officials and the environment. Meth can be easily made using readily available materials, such as ammonia, batteries, starter fluid and ephedrine pills. Rates of meth use vary greatly from region to region, with the highest prevalence seen throughout the Pacific, Southwest and West Central portions of the country. Meth availability is currently on the rise in the Great Lakes and Southeast regions as well as in the gay communities in major urban areas across America.²

Using meth causes the body to release high levels of dopamine, a neurotransmitter that enhances mood and body movement. Short-term physical reactions to meth include increased wakefulness, physical activity, respiration, hyperthermia and decreased appetite. Long-term risks include cardiovascular collapse and decreased dopamine levels, which can lead to Parkinson's disease-like symptoms.³

Preventing meth use among our nation's youth must be a priority in order to reduce its costs and consequences. There are three major domains of prevention that are most effective: parents, schools and communities. Research shows that each domain needs to be reinforced by the other two for the greatest impact to be achieved. Consequently, it will never be enough to put the responsibility solely on the parent, the child, the school or the community. There needs to be a comprehensive blend of individually and environmentally focused prevention efforts. Multiple strategies across multiple sectors of a community are the most effective way to reduce drug use, in general, and meth use in particular.

There have been a core set of substance abuse prevention programs across federal agencies that have complemented each other in raising awareness about meth and its consequences on individuals, families, communities and the environment. With the exception of the Center for Substance Abuse Prevention's (CSAP) Strategic Prevention Framework /State Incentive Grant (SPF/SIG) program and the Office of National Drug Control Policy's (ONDCP) Drug Free Communities (DFC) Support program, most of these programs are slated for elimination in the President's fiscal year 2006 budget request. Specifically, the President's fiscal year 2006 request proposes the elimination of the State Grants portion of the Safe and Drug Free Schools and Communities (SDFSC) program (–\$441 million); the CSAP methamphetamine grant program (–\$1.9 million); and the Drug Enforcement Administration (DEA) Demand Reduction program (–\$9 million).

¹ Office of Applied Studies, The Substance Abuse and Mental Health Service Administration's (SAMHSA's) 2003 National Household Survey on Drug Use and Health.

² ONDCP Drug Policy Information Clearinghouse. Methamphetamine. November 2003. Available at <http://www.whitehousedrugpolicy.gov/publications/pdf/ncj197534.pdf>

³ National Institute on Drug Abuse (NIDA). "NIDA InfoFacts: Methamphetamine." Available at: <http://www.nida.nih.gov/Infafax/methamphetamine.html> Revised June, 2004.

SIGNIFICANT OUTCOMES FROM THE STATE GRANTS PORTION OF THE SDFSC PROGRAM

The State Grants portion of the Safe and Drug Free Schools and Communities (SDFSC) program is the primary source of federal funding for school based prevention that directly targets all of America's youth in grades K–12 with drug education, prevention and intervention programming. The program funds essential and effective services including: peer resistance and social skills training, student assistance, parent education and education about emerging drug trends. This program has contributed to significant reductions in meth use among school-aged youth in many of the states that have been hardest hit by the meth epidemic. For example:

California.—Between 1997 and 2002 the California Safe and Drug Free Schools and Communities program contributed to a decrease of 52.9 percent in past 30 day meth use among 9th graders. In 1997, 3.4 percent of respondents reported using meth in the past month, while in 2002 only 1.6 percent of respondents had used meth (California Student Survey, 1997 & 2002).

Hawaii.—Between 1998 and 2002 the Hawaii Safe and Drug Free Schools and Communities program contributed to a decrease of 37.3 percent in lifetime meth use among 10th graders. In 1998, 6.7 percent of respondents reported using meth in their lifetime, while in 2002 only 4.2 percent of respondents had used meth (Hawaii Student Alcohol, Tobacco and Other Drug Use Study, 2002).

Idaho.—Between 1996 and 2004 the Idaho Safe and Drug Free Schools and Communities program contributed to a decrease of 51.9 percent in lifetime meth use among 12th graders. In 1996, 10.4 percent of respondents reported using meth in their lifetime, while in 2004 only 5.0 percent of respondents reported meth use (Idaho Survey, 1996 and SDFS Survey, 2004).

Iowa.—Between 1999 and 2002 the Iowa Safe and Drug Free Schools and Communities program contributed to a decrease of 50.0 percent in past 30 day meth use among 6th, 8th and 11th graders. In 1999, 2.0 percent of respondents reported using meth in the past 30 days, while in 2002 only 1.0 percent of respondents had used meth (Iowa Youth Survey, 1999 & 2002).

Kansas.—Kansas' Safe and Drug Free Schools and Communities program contributed to a decrease of 54.3 percent in past 30 day meth use among 8th graders, down from 2.19 percent in 1997 to 1 percent in 2003 (Kansas Communities that Care Survey, 2003).

Maryland.—Maryland's Safe and Drug Free Schools and Communities program contributed to a decrease of 47 percent in past 30 day meth use among 8th graders, down from 1.9 percent in 1998 to 1.0 percent in 2002 (Maryland State Department of Education's Maryland Adolescent Survey, 2003).

Pennsylvania.—Between 2001 and 2003 the Pennsylvania Safe and Drug Free Schools and Communities Support Program contributed to a decrease of 31.8 percent in lifetime meth use among 12th graders. In 2001, 4.4 percent of respondents reported using meth in their lifetime, while in 2003 only 3.0 percent of respondents had used meth (Pennsylvania Youth Survey, 2003).

Washington.—Between 2000 and 2002 the Washington Safe and Drug Free Schools and Communities Support Program contributed to a decrease of 17.2 percent in past 30 day meth use among 12th graders. In 2000, 2.9 percent of respondents reported using meth in their lifetime, while in 2002 only 2.4 percent of respondents reported using meth (Washington's Healthy Youth Survey, 2000 & 2002).

The Administration's proposal to eliminate the State Grants portion of the SDFSC program would decimate the nation's school based substance abuse prevention infrastructure. Rural and frontier communities, where meth production and use inflict the greatest harm, would be left with virtually no school based drug prevention programming. The SDFSC program is the cornerstone of all school based drug prevention and intervention activities. Without it there would be no staff in our nation's schools whose responsibility is to provide general drug education and specialized programming for specific drugs such as meth.

THE DRUG-FREE COMMUNITIES PROGRAM (DFC) REDUCES METH USE

Community anti-drug coalitions are broad based groups consisting of multiple community sectors that use their collective energy, experience and influence to address the drug problem in their neighborhoods, cities and/or counties. These coalitions develop comprehensive, community-wide strategies for addressing every aspect of their substance abuse problems, including prevention, intervention, treatment, aftercare and law enforcement, but with a particular focus on prevention. The DFC program funds community anti-drug coalitions to address their locally identified drug problems. DFC grantees are required to provide a dollar for dollar match of non federal support for every federal dollar they receive. In addition, the grantees

are required to be data driven and comprehensive in their mix of community partners and the strategies they implement.

The success of meth prevention efforts hinges upon the extent to which schools, parents, law enforcement and other community groups work comprehensively and collaboratively through community-wide efforts to implement a full array of education, prevention, enforcement and treatment initiatives. The SDFSC program acts as a portal into our nation's schools for community partners to access K-12 students and also provides the school based representation in community anti-drug coalition efforts.

Project Radical in Reinbeck, Iowa

Project Radical, a DFC grantee, has achieved impressive reductions in meth use in Reinbeck, Iowa. The successful strategies used by this coalition to address meth, included an important school based component funded by the SDFSC program.

The Project Radical Coalition contributed to a decrease in past thirty day meth use by 12th graders, down from 5 percent in 1999 to 0 percent in 2003, resulting in a 100 percent rate of change (American Drug and Alcohol Survey, 2003).

Between 2004 and 2005, the Project Radical Coalition contributed to an increase of 3.2 percent in the number of 11th graders who reported NEVER using meth in the past thirty days. In 2004, 96.1 percent of students had not used meth in the last 30 days, while in 2005, 99.2 percent reported that they had not used meth in the past 30 days (The Culture and Climate Survey, 2005).

To achieve these results, the Project Radical Coalition collaborated with multiple community partners. In conjunction with SDFSC coordinators, the coalition developed a state certified mentoring program and became a certified SAFE (Substance Abuse Free Environment) community. Funding from the SDFSC program was used to purchase and implement science-based curricula for the Strengthening Families, Project Alert and Life Skills Training prevention programs. Through collaboration with community members, local businesses and law enforcement officials, Project Radical was able to implement the MethWatch program in their community. The MethWatch program promotes cooperation between retailers and law enforcement to curtail the theft and suspicious sales of products used to manufacture meth. In addition, the cooperation of multiple community sectors also helped to create the Get a Grip program, which focuses on youth substance abuse screening, intervention and treatment referrals.

Phillips County Coalition for Healthy Choices in Malta, Montana

Another example of the significant outcomes that can be achieved when multiple community sectors, including schools, law enforcement, parents, the media and service organizations, collaborate to address meth use is the Phillips County Coalition. This DFC grantee contributed to reducing the number of 7th and 8th graders in Phillips County, Montana who reported using meth in the last thirty days at a rate of 37.5 percent, from 3.2 percent in 1999 to 2.0 percent in 2003. This is a significant reduction when considering that the average thirty day use of meth in middle schools throughout the state of Montana is 4.6 percent.

To achieve these successes the coalition implemented numerous strategies aimed at the reduction of methamphetamine use, including school based activities, public service announcements, local news coverage, parent education and community-wide training opportunities to provide the public with accurate information about the effects of meth production and use.

CONCLUSION

Reducing meth use among youth requires the collaboration of multiple community sectors, including schools, parents, youth, law enforcement, the faith community, business leaders and social service providers. This comprehensive approach is necessary in order to provide parents, youth and other community members with the information and skills necessary to understand the multiple risks and harms associated with meth production and use.

Research from the National Institute on Drug Abuse (NIDA) has confirmed that as the perception of risk associated with a particular drug rises, use of that drug declines. Collaborative approaches at the local and state levels between the SDFSC program, the DFC program, the SPF/SIG program and DEA's Demand Reduction Program have raised awareness about the harmfulness of meth and led to the implementation of comprehensive community wide strategies and programs to address meth production, sale and use. The combined efforts of these federal programs have had significant results in reducing meth use among youth in states and communities across America.

This is NOT the time to eliminate funding for the State Grants portion of the SDFSC program, CSAP's methamphetamine grant program or the DEA Demand Reduction Program! These programs are all necessary components of more comprehensive, community-wide efforts to reduce and effectively address meth use and its consequences in communities across America.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF STATE ALCOHOL AND DRUG ABUSE DIRECTORS, INC.

Chairman Specter, Ranking Member Harkin, Members of the committee, my name is Lewis E. Gallant, Ph.D., and I serve as Executive Director of the National Association of State Alcohol and Drug Abuse Directors (NASADAD). Thank you for holding this hearing today regarding methamphetamine and its impact on American families and communities. We sincerely appreciate the resources this Committee has dedicated to prevention, education, treatment, research and recovery programs. As you examine further actions regarding methamphetamine, we offer our support and commitment and look forward to working with you and others on this important issue.

People Can and Do Recover from Methamphetamine Addiction.—If there is but one message to take home from today's hearing, it is this: people can and do recover from methamphetamine addiction. Indeed, methamphetamine may present unique challenges for our State systems. However, studies have shown that clinically appropriate services (screening, assessment, referral, individualized treatment plans within the appropriate level of care and for the indicated duration of treatment, along with aftercare and other supports) provided by qualified staff help people with methamphetamine addiction enter into recovery.

Core Recommendations.—There is no doubt that a comprehensive approach is needed to address the problems associated with methamphetamine. In addition to prevention, treatment and recovery support services, other entities that must be part of the answer include law enforcement, schools, child welfare representatives, businesses, and others. For this hearing, NASADAD would like to offer the following core recommendations as you consider action on methamphetamine:

- Federal Funding for Prevention and Treatment Services
- Coordination with the Single State Authorities (SSAs) for Substance Abuse
- Public Outreach and Education Regarding Methamphetamine Addiction
- Federal Support for Research
- Information Dissemination for Curriculum, Staff Training, Best Practices

NASADAD Members and Mission.—NASADAD represents State Substance Abuse Agency Directors—also known as Single State Authorities (SSAs) for Substance Abuse. SSAs have the front line responsibility for managing our nation's publicly funded prevention and treatment service system—including the Substance Abuse Prevention and Treatment (SAPT) Block Grant. NASADAD's mission is to promote effective and efficient State substance abuse service systems.

NASADAD Policy Priorities.—NASADAD's key policy priorities for 2005 are to (1) strengthen State substance abuse systems and the office of the Single State Authority (SSA), (2) expand access to prevention and treatment services, (3) implement an outcome and performance measurement system, (4) ensure clinically appropriate care, and (5) promote effective policies related to co-occurring populations.

What is Methamphetamine?—Methamphetamine is an addictive stimulant that impacts the central nervous system. The drug can be smoked, injected, inhaled or swallowed. As noted by the Council of State Governments' (CSG) in *Drug Abuse in America—Rural Meth* (2004), "Although the main source in the United States is Mexican drug trafficking organizations, small, clandestine meth labs have popped up by the thousands all over the country and account for more than half of labs seized by enforcement." In many cases, methamphetamine is manufactured using common household chemicals in makeshift laboratories by extracting pseudoephedrine or ephedrine from cold medicine. Other ingredients can include anhydrous ammonia, lithium metal strips torn from batteries, and red phosphorous found in matches. According to *Michigan's Methamphetamine Control Strategy* (2002), \$80.00 spent at a pharmacy and hardware store can buy ingredients to make an ounce of methamphetamine worth \$1,000.

Quick History.—Methamphetamine is not a new drug. According to *Methamphetamine in Missouri* 2004, a policy brief written by Missouri's Division of Alcohol and Drug Abuse, "The amphetamine family of drugs was first introduced to the medical field in the 1930's as a nasal decongestant. Amphetamine was used in Japan during World War II to provide soldiers energy and to prevent sleepiness. Eventually, the drug was made available to the public, and amphetamine abuse was widespread in

Japan among young people.” The report then notes that amphetamine abuse did not become pronounced in the United States until the 1960s.

Methamphetamine Use and Prevalence.—According to the National Survey on Drug Use and Health (NSDUH), approximately 12.3 million Americans ages 12 or over tried methamphetamine in 2003. The Drug Abuse Warning Network (DAWN), which monitors drug use reports in emergency departments in certain parts of the country, detected a steep rise in methamphetamine related visits over the past 10 years—with approximately 15,000 in 1995 compared to 39,000 in 2002.

The Substance Abuse and Mental Health Services Administration (SAMHSA) reported that in more than three-quarters of Western States, methamphetamine/amphetamine-related treatment admissions rates are higher than cocaine- or heroin-related admissions rates (Arkansas, Arizona, California, Hawaii, Iowa, Montana, North Dakota, Nebraska, Nevada, Oklahoma, Oregon, South Dakota, Utah, Washington, Wyoming). Although States report data in different ways, some specific reports from Single State Authorities show the following:

Iowa’s Division of Health Promotion, Prevention and Addictive Disorders noted that methamphetamine treatment admissions were 4,745 or 10.7 percent of all admissions in fiscal year 2001; 5,297 or 12.3 percent of all admissions in fiscal year 2002; 5,585 or 13.2 percent of all admissions in fiscal year 2003; and 6,170 or 14.5 percent of all admissions in fiscal year 2004.

Idaho’s Substance Abuse Program reported that methamphetamine clients in the publicly funded system represented 16 percent of all admissions in 1997 and 34 percent of all admissions in 2004.

Washington’s Division of Alcohol and Substance Abuse reported that in 1993, there were 579 admissions for individuals with methamphetamine as their primary drug of abuse—representing 1.5 percent of all admissions. In 2003, there were 5,994 such admissions—representing 20 percent of all admissions. For youth, 3 percent of all admissions were methamphetamine users in 1999. In 2003, 9 percent of all admissions for youth were methamphetamine users. In all, between 1994 and 2000, Statewide admissions for amphetamine /methamphetamine addiction increased 600 percent.

Louisiana’s Office for Addictive Disorders reported that there were 1,119 total admissions for methamphetamine in State fiscal year 2004. According to the State’s Communities that Care survey, 8 percent of high school seniors tried methamphetamine at least once in 1998 compared to 9.8 percent in 2001. Between 2000 and 2003, methamphetamine emergency department mentions almost doubled (from 27 to 53). In Region VII, Bossier City police seized 1,103 grams of methamphetamine in 2002 with a street value of \$110,260.

Hawaii’s Alcohol and Drug Abuse Division reported that in State fiscal year 2001, there were 763 admissions for methamphetamine. By State fiscal year 2003, there were 1,156 admissions.

Nevada’s Bureau of Alcohol and Drug Abuse (BADA) reported the following admissions for clients using methamphetamine as their primary substance of abuse: 2,232 in 1999—representing 21 percent of all admissions; 2,494 in 2000; 2,608 in 2001; 2,792 in 2002; 3,300 in 2003 and 3,550 in 2004—representing 29 percent of all admissions.

The Texas Division of Mental Health and Substance Abuse reported an increase in the percentage of methamphetamine admissions to State-funded treatment centers over the last 4 years, 10.5 percent of total admissions in 2004 compared to 5 percent of total admissions in 2000.

California’s Department of Alcohol and Drug Programs reported 72,959 admissions for methamphetamine from July 2003 through June 30, 2004. This compares with 3,853 admissions for amphetamine/methamphetamine clients in 1986. Total methamphetamine mentions in emergency rooms increased 43.1 percent from 1998 (2,123) to 2002 (3,038).

Colorado’s Alcohol and Drug Abuse Division reported that methamphetamine treatment admissions doubled between 1999 (1,541 admissions) and 2003 (3,189 clients). Overall, methamphetamine clients in 2003 represented 23.3 percent of all admissions in the State—overtaking cocaine users (21.9 percent) for the first time.

Utah’s Division of Substance Abuse and Mental Health reported that 58 clients were admitted for methamphetamine addiction in 1991. In 2004, there were 5,484 methamphetamine treatment admissions.

Missouri’s Division of Alcohol and Drug Abuse reported that there were 716 methamphetamine treatment admissions in 1995—and 3,607 in 2003. Approximately 64 percent of these admissions in 2003 reported their first use at age 21 or younger and 48.5 percent of referrals came from the criminal justice system.

While the methamphetamine is indeed a problem in the West, DAWN noted that “. . . recent data suggest that the problem may be spreading eastward.”

Studies Show People Can and Do Recover from Methamphetamine Addiction.—As noted earlier, the number one message to take home from today's hearing should be that people can and do recover from methamphetamine addiction. Richard A. Rawson, Ph.D., a noted expert in methamphetamine from UCLA, remarked:

“Interestingly, a pervasive rumor has surfaced in many geographic areas with elevated methamphetamine problems. The rumor is that methamphetamine users are virtually untreatable with negligible recovery rates. Rates from 5 percent to less than 1 percent have been quoted in newspaper articles and been reported in conferences on methamphetamine. The resulting conclusion is that spending money on treating methamphetamine users is futile and wasteful. When asked about the source of such numbers, speakers are uncertain about their origin. In fact, no data exists. The fact that methamphetamine users bring new clinical challenges into treatment settings appears to have been translated into spurious statistics” (*Challenges in Responding to the Spread of Methamphetamine Use in the U.S.*, 2005).

One study funded by the Center for Substance Abuse Treatment (CSAT) included an eight-site evaluation of methamphetamine treatment. In particular, an outpatient approach called the “Matrix Model,” which has been used for over ten years, was examined. This regimen involves a 16 week non-residential, psychosocial approach used for drug dependence. In 2004, Dr. Rawson and his colleagues found that people entered into recovery using both the Matrix Model and other approaches. Specifically, at discharge and follow-up points, between 57 percent and 68 percent reported no methamphetamine use for the previous 30 days.

Outcomes data provided by SSAs also demonstrate that services can and do help people addicted to methamphetamine. Although States collect data in different ways, some examples include:

Iowa's Division of Health Promotion, Prevention and Addictive Disorders points to a 2003 evaluation of a CSAT funded Targeted Capacity Expansion (TCE) Grant that it received specifically for methamphetamine treatment. The evaluation found that 71.2 percent of the study's clients using methamphetamine remained abstinent for 6 months after treatment and 75.4 percent of clients were abstinent one year after treatment. The report also found that 90.4 percent of methamphetamine clients had not been arrested 6 months after treatment and 66.7 percent were working full time one year after treatment. A one-page overview of research findings in Iowa is attached.

Washington's Division of Alcohol and Substance Abuse points to an analysis of the federally funded TOPPS 2 grant, where it was found that there were no statistically significant differences in outcomes between adult methamphetamine users and those using other substances. In particular, there were no differences in treatment readmission (18.9 percent for methamphetamine users and 20.5 percent for non-methamphetamine users); no differences in employment (49.2 percent of methamphetamine users gained employment while 49 percent of non-methamphetamine users gained employment); and methamphetamine users receiving treatment had fewer hospital admissions compared to others (6.8 percent of methamphetamine users were admitted to hospitals after treatment while 10.7 percent of non-methamphetamine users were admitted to hospitals after treatment).

Nevada's Bureau of Alcohol and Drug Abuse (BADA) reported that out of the 1,664 clients addicted to methamphetamine who completed treatment in 2004, 92.9 percent (1,546 clients) were drug free at discharge.

The Texas Division of Mental Health and Substance Abuse examined data describing 2004 methamphetamine clients. For outpatient methamphetamine clients completing treatment, 78 percent reported abstinence 60 days after discharge. For non-methamphetamine outpatient clients completing treatment, 80 percent reported abstinence 60 days after discharge. In examining 2004 data for residential methamphetamine clients completing treatment, 77 percent reported abstinence 60 days after discharge. For non-methamphetamine clients completing residential treatment, 78 percent reported abstinence 60 days after discharge. Finally, the Division examined outcomes for publicly funded methamphetamine clients over a four year period (2001, 2002, 2003 and 2004). The data found that 88 percent of methamphetamine clients reported abstinence 60 days after discharge.

Missouri's Division of Alcohol and Drug Abuse reported findings from a 2000 TOPPS II study comparing methamphetamine clients with those who did not have a methamphetamine problem. The evaluation found, at 6 months and 12 months after admission, no substantial outcome differences between methamphetamine users and other drug and alcohol users. In fact, 80 percent of the methamphetamine users reported that they were satisfied with treatment while 61 percent of the comparison group reported satisfaction with treatment.

Colorado's Alcohol and Drug Abuse Division reported that 80 percent of methamphetamine users were meth-free when discharged from treatment compared to 70 percent of clients who did not use their drug of choice when discharged after treatment.

Utah's Division of Substance Abuse and Mental Health reported that for State fiscal year 2004, 60.4 percent of methamphetamine admissions were reported to have successfully completed treatment. Of those methamphetamine users completing treatment, 60.8 percent reported being abstinent at discharge.

Tennessee's Bureau of Alcohol and Drug Abuse reported a 2002–2003 study that specifically examined stimulant abuse among publicly funded clients in Tennessee, including abuse of amphetamine/methamphetamine, found that over 65 percent of clients reported that they were abstinent six months after admission. In addition, the percentage of those working full time quadrupled, from 9.6 percent to 45.8 percent; the proportion of those living with their immediate family increased from 12 percent before treatment to 50.6 percent; and while 66.9 percent of clients had arrest records two years prior to treatment, only 11.4 percent of clients had been re-arrested 6 months after admission.

South Dakota's Division of Alcohol and Drug Abuse reported that approximately half (45.1 percent) of methamphetamine clients in the study were abstinent one year after treatment in 2003. During that same year, methamphetamine clients experienced fewer arrests after treatment compared to 12 months before admission in the following categories: driving while intoxicated, disorderly conduct, assault or battery, theft, possession of drugs, and sale of drugs. Before treatment, nearly two-thirds of methamphetamine clients had been jailed overnight, but this rate declined to 10.8 percent for those who remained abstinent one year post treatment.

SPECIFIC RECOMMENDATIONS

Federal Funding for Prevention and Treatment Services.—NASADAD is very appreciative of this Committee's history of providing increased and sustained federal resources for treatment and prevention services. As we look at services for methamphetamine prevention and treatment, just as we look at services for all substances causing addiction, there are a number of programs within SAMHSA that are critical. SAMHSA, under the leadership of Administrator Charles Curie, is working on a number of fronts to address this important issue. Below is an overview of these key programs and funding recommendations for fiscal year 2006 that stem from consensus reached by a number of national organizations that focus on addiction and recovery.

The Substance Abuse Prevention and Treatment (SAPT) Block Grant is the foundation of our publicly funded prevention and treatment system. NASADAD recommends \$1,847,000,000 in fiscal year 2006 for an increase of \$71 million, or 4 percent, compared to fiscal year 2005. The SAPT Block Grant provides assistance to our most vulnerable populations—including those with methamphetamine addiction—to help them secure the services they need. In 2001, the SAPT Block Grant provided support to over 10,500 community-based organizations across the country. In addition, a 20 percent prevention set-aside within the SAPT Block Grant supports prevention services. This prevention set-aside helps our youth steer clear of alcohol and drugs—including methamphetamine.

Federal support is also needed for the *Center for Substance Abuse Treatment (CSAT)*, which is led by Dr. H. Westley Clark. NASADAD recommends \$472 million for CSAT for fiscal year 2006. This includes \$150 million for the President's Access to Recovery (ATR) drug treatment voucher program—for an increase of \$50 million over fiscal year 2005. ATR is a competitive grant designed to expand access to clinical treatment and recovery support services.

CSAT's Targeted Capacity Expansion (TCE) program is another federal tool that increases access to methamphetamine treatment. As part of the Methamphetamine Anti-Proliferation Act of 2000, the Director of CSAT was authorized to award grants directly to State Substance Abuse Agencies to specifically address the problem of methamphetamine. NASADAD recommends a strong investment in this specific mechanism.

Work also must be done to support the Center for Substance Abuse Prevention (CSAP) to ensure a strong and coordinated methamphetamine prevention strategy. NASADAD is very concerned with the proposed \$14.4 million cut to CSAP and recommends that \$210 million be appropriated for CSAP in fiscal year 2006—for an increase of \$11 million over fiscal year 2005.

Within the fiscal year 2006 proposed budget, NASADAD applauds CSAP, and the work of Director Beverly Watts Davis, for planning to increase the number of Strategic Prevention Framework State Incentive Grants (SPF SIGs). In particular,

CSAP plans to provide \$93.4 million for an increase of approximately \$8 million over fiscal year 2005 in order to support a total of 32 grants (25 continuations and seven new). NASADAD recommends any fiscal year 2006 increase for CSAP be dedicated to the goal of awarding a SPF SIG grant to every State in the country.

Coordination with Single State Authorities (SSAs).—As noted above, State Substance Abuse Directors, also known as Single State Authorities (SSAs), manage the publicly funded treatment and prevention system. Their job is to plan, implement and evaluate a Statewide comprehensive system of clinically appropriate care. Every day, SSAs must work with a number of public and private stakeholders given the fact that addiction impacts everything from education, criminal justice, housing, employment and a number of other areas. As a result, Federal initiatives regarding methamphetamine should closely interact and coordinate with SSAs given their unique role in planning, implementing and evaluating State addiction systems.

An illustration of the collaborative work done by SSAs is their interaction with the child welfare system. It is estimated nationally that substance abuse is a factor in 40 percent to 80 percent of child welfare caseloads, with approximately two-thirds of parents or primary care givers involved in the child welfare system requiring substance abuse treatment. Despite the need for services, existing treatment capacity can only meet less than one-third of the demand. The funding recommendations included in this testimony will help support necessary treatment—and help reunite families.

As we look at methamphetamine in particular, children are indeed impacted every day. According to policy brief issued by Carnevale Associates, 3,419 children were endangered by methamphetamine production in 2003. The Office of National Drug Control Policy (ONDCP) reports that there were 14,260 methamphetamine lab-related incidents in fiscal year 2003. Children were present at 1,442 of these incidents while 1,447 children resided in the labs. With this in mind, NASADAD encourages close collaboration between law enforcement, social services, child welfare agencies and SSAs to ensure child safety, protection and permanency, effective methamphetamine addiction treatment for family members, and elimination of home-based methamphetamine labs.

Public Outreach and Education Regarding Methamphetamine Addiction.—More must be done to educate the public regarding the fact that people can and do recover from methamphetamine addiction. Forums such as this hearing will be critical to making progress in addressing the false perceptions of methamphetamine and addiction treatment. In addition, support for prevention programs in our schools is a vital part of this education and outreach.

One important federal program that helps our efforts to prevent methamphetamine use before it starts is the *Department of Education's (Dept. Ed) Safe and Drug Free Schools and Communities—State Grants Program*. For fiscal year 2006, the Administration proposed to completely eliminate the SDFSC State Grants program—representing a cut of \$441 million. NASADAD recommends a complete restoration of these funds so that the program may continue to reach an estimated 37 million youth annually and share tools that will help youth remain drug free.

Another important tool is SAMHSA's Treatment Improvement Protocols (TIP) series. For methamphetamine use, SAMHSA's TIP 33, *Treatment for Stimulant Disorders*, gives substance use disorder treatment providers with vital information about the effects of stimulant abuse and dependence, discusses the relevance of these efforts to treating stimulant users, describes treatment approaches that are appropriate and effective, and makes specific recommendations on the practical application of these treatment strategies.

Federal Support for Research.—Congress should continue its strong support of research at the National Institute on Drug Abuse (NIDA) so that we may learn more about the impact methamphetamine and the potential promise of medication as an adjunct to methamphetamine treatment. In particular, NASADAD recommends \$1,067 million for NIDA for an increase of \$60.4 million over fiscal year 2005.

NIDA-supported research has led to a greater understanding of the impact of methamphetamine on the brain. In particular, NIDA researchers have discovered that methamphetamine damages nerve terminals in the dopamine- and serotonin-containing regions of the brain. NIDA has also established the Methamphetamine Clinical Trials Group (MCTG) to conduct clinical trials of medications for methamphetamine in States where the drug is particularly popular. Finally, NIDA's research served as the foundation for the Matrix Treatment model, which has been effective in treating methamphetamine dependence.

NASADAD commends NIDA for joining CSAT to sponsor a series of meetings to focus on how to translate research into every day practice. Specifically, discussions are examining the link between SSAs and NIDA's Clinical Trials Network (CTN). NIDA and CSAT also sponsored a session at NASADAD's 2004 Annual Meeting in

Maine and will sponsor a session at the 2005 Annual Meeting in Florida. Finally, we are pleased with the NIDA/SAMHSA Request for Applications (RFA) designed to strengthen SSAs capacity to support and engage in research that will foster Statewide adoption of meritorious science-based policies and practices. These activities will be important tools that will inform our efforts related to methamphetamine.

Information Dissemination.—Federal support for State-to-State information sharing regarding curriculum development, staff training and other best practices is critical—and may help prevent certain States from experiencing the level of methamphetamine use that some Western States have seen for years.

A vital tool in addressing methamphetamine prevention, treatment and recovery is the *Addiction Technology Transfer Centers (ATTCs)*. ATTCs, funded by SAMHSA, began in 1993 and have grown into a national network with fourteen regional centers (including Pennsylvania, Iowa, Texas, Nevada, Illinois) and a national office serving all fifty states. The mission of the ATTC network is to bridge the gap between alcohol and drug treatment scientists and substance abuse treatment practitioners. Simply put, ATTCs help translate the latest science into actual practice.

ATTCs sponsor conferences and workshops to expose substance abuse counselors to current research-based practices, offer academic programs and coursework in addiction, provide technical assistance, conduct workforce studies, coordinate leadership activities, develop training curricula and products, and create online courses and classes. The ATTCs coordinate activities to recruit individuals to enter the addiction treatment field and to develop strategies to help retain the current workforce.

Two useful tools already generated by the ATTCs relating to methamphetamine include *Methamphetamine 101—the Etiology and Physiology of an Epidemic*, along with *Methamphetamine 102—Introduction to Evidence-Based Treatments* both available at <http://www.psattc.org>.

NASADAD remains concerned with the Administration's proposal to cut the ATTC program by approximately \$1.6 million (from \$8,166,000 to \$6,606,000) compared to fiscal year 2005. NASADAD recommends restoring this proposed cut to the ATTC program.

Support for Regional and State Summits.—Although methamphetamine use is more prevalent in the West, studies demonstrate that the drug has made its way across the country and remains a concern of all States. Specific challenges remain that are unique to individual States and regions of the country. For some States that have not yet seen a spike in methamphetamine admissions, action is being taken now to ensure coordinated plans are in place to address any potential trends. For example, Vermont recently held a Methamphetamine Summit and Educational earlier this year to provide training on methamphetamine prevention and treatment strategies. This meeting included members of the law enforcement community; public health agencies; community coalitions and others. Strong federal support to help convene regional meetings of SSAs and others would help facilitate information specifically about methamphetamine—and could allow certain areas of the country to stop the problem before it starts.

CONCLUSION

NASADAD appreciates the opportunity to provide input on this important issue. We look forward to working with the Committee, SAMHSA and others as we move forward.

[From the Iowa Department of Public Health]

IOWA EVALUATIONS SUPPORT BASIC MESSAGE: WITH TREATMENT, PEOPLE RECOVER FROM METHAMPHETAMINE ADDICTION

Background.—Two studies done in Iowa (*Iowa Adult Methamphetamine Treatment Project—Final Report, 2003* and *Iowa Outcomes Monitoring System (IOMS)—Iowa Project, 2004*) demonstrate that treatment for methamphetamine addiction is effective. Key findings are below.

Treatment is effective in stopping methamphetamine use.—The 2003 report found that 71.2 percent of the clients using methamphetamine remained abstinent 6 months after treatment and 75.4 percent of clients were abstinent one year after treatment. The 2004 report found that of those who were interviewed 6 months after their discharge, 65.5 percent of methamphetamine users were abstinent, 53.3 percent of marijuana users were abstinent, and 43.9 percent of those admitted for alcohol abuse were abstinent.

Treatment helps those in recovery from methamphetamine addiction stay out of jail.—The 2003 report found that 90.4 percent of methamphetamine clients had not

been arrested 6 months after treatment and 95.7 percent of methamphetamine clients interviewed one year after treatment had not been arrested during the previous 6 months. The 2004 study found that in the six months after treatment, 86 percent of methamphetamine users had not been arrested, 90.7 percent of alcohol users had not been arrested, 79.2 percent of cocaine users were not arrested, and 86.8 percent of marijuana users were not arrested. These rates compare to 30.9 percent of clients who had not been arrested in the 12 months prior to treatment.

Treatment helps people get back to work.—The 2003 report found that 54.8 percent of the methamphetamine clients were working full time 6 months after treatment while 66.7 percent were working full time one year after treatment. The 2004 report found that the percentage of those employed full time increased by 16.7 percent for all clients.

While longer treatment periods improve outcomes, results for patients treated for approximately 60 days or less are still impressive.—The 2003 study found that methamphetamine clients interviewed 6 months after discharge who had longer lengths of treatment (more than 90 days) were almost one and a third times more likely to remain abstinent and about one and a half times more likely to be employed full time. The 2004 study found that the average methamphetamine patient was treated for 65.9 days. In general, patients with a range of addiction problems who were treated for longer periods of time were more likely to be abstinent: 41.8 percent for 31–60 days, 47.6 percent for 61–90 days, 54.4 percent for 91–120 days and 62.4 percent for more than 120 days.

ABOUT THE STUDIES

Iowa Adult Methamphetamine Treatment Project—Final Report, 2003.—The Iowa Department of Public Health (IDPH) received a three-year grant (1999–2002) from the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center Substance Abuse Treatment (CSAT) to expand and study the treatment of methamphetamine addiction in Polk County, Iowa. Approximately 76 percent of the 306 clients participated in the follow-up study.

Iowa Outcomes Monitoring System (IOMS)—Iowa Project, 2004.—The Iowa Consortium for Substance Abuse Research and Evaluation released a study regarding 832 randomly selected clients who were admitted to treatment during 2003. In all, 83 declined to participate. Of those remaining, 582 were selected for follow-up interviews 6 months after discharge, of which 362 were completed.

PREPARED STATEMENT OF THE HEARTLAND FAMILY SERVICE, INC.

Chairman Specter, Ranking Member Harkin, and members of the Subcommittee, Heartland Family Service appreciates the opportunity to submit this testimony concerning the problem of methamphetamine abuse as it affects Southwest Iowa.

Heartland Family Service is a non-profit, 501(c)(3), non-sectarian human services agency that has served Southwest Iowa since 1977. The agency is committed to low and moderate-income families and offers a variety of programs to strengthen individuals and families through education, counseling and support. Service is provided in Pottawattamie, Harrison, Crawford, Monona, Shelby, Mills, Cass, Montgomery, Page and Fremont counties, Iowa.

While methamphetamine use is not a new epidemic in Iowa, the problem continues to grow at an alarming rate. Furthermore, the rate at which methamphetamine is manufactured in Southwest Iowa is even more alarming. When added to the already evident problems presented by the use of other substances such as alcohol, cocaine and marijuana, it becomes apparent that something must be done. The following statistics, according to Iowa's Drug Control Strategy for 2002, show substance abuse trends in Iowa (ODCP, 2001). Statistics for 2002 were obtained directly from the Iowa Department of Public Health.

ADULT SUBSTANCE ABUSE TREATMENT SCREENINGS/ADMISSIONS BY PRIMARY DRUG OF ABUSE FOR THE STATE OF IOWA

	1999 (percent)	2000 (percent)	2001 (percent)	2002 (percent)
Alcohol	65.4	65.9	63.0	60.9
Marijuana	12.3	8.2	17.6	18.2
Methamphetamine	9.1	10.6	12.1	13.7
Cocaine/Crack	6.3	7.8	5.3	4.7

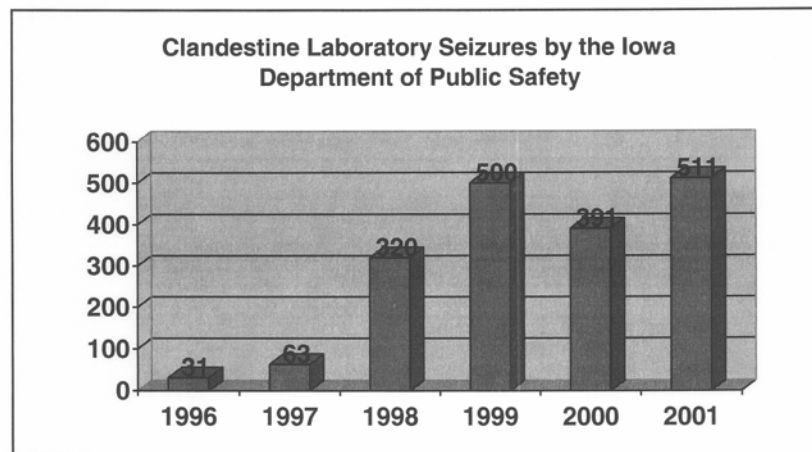
**ADULT SUBSTANCE ABUSE TREATMENT SCREENINGS/ADMISSIONS BY PRIMARY DRUG OF ABUSE
FOR THE STATE OF IOWA—Continued**

	1999 (percent)	2000 (percent)	2001 (percent)	2002 (percent)
Other/Unknown	6.9	7.5	2.0	2.5

Source: Iowa's Drug Control Strategy 2002.

As the U.S. Department of Justice National Drug Threat Assessment 2002 indicates, methamphetamine production began spreading eastward in the mid- to late 1990's in order to keep pace with growing demand, and it has become increasingly available in the eastern United States (NDIC, 2001). Users have now learned simple production methods to produce their own supply, and according to the Iowa Department of Public Health, methamphetamine labs in Iowa have become a serious, growing concern (IDPH, 2002a).

Also during the 1990's, methamphetamine began to replace cocaine as the drug of choice for many of Iowa's illicit drug users. Not only is this drug less expensive and more readily available than cocaine, but its effects last for eight to twelve hours, as compared to cocaine which lingers for only one to two hours. Consequently, according to the Iowa Department of Public Safety, methamphetamine remains the major drug of choice in Iowa (IDPS, 2001). The following chart illustrates the trend in Clandestine Laboratory seizures by the Iowa Department of Public Safety from 1996 through 2001 (Fourth Judicial, 2002).



Source: Fourth Judicial District Research Initiative Examining Drug Prevalence in the Recent Arrestee Population

Also according to the Fourth Judicial Research Initiative (which closely examined drug prevalence in nine counties of Southwest Iowa in comparison to the entire state of Iowa), as of December 31, 2001, an additional 257 labs had been investigated by local and county agencies throughout the entire state. The combined total of clandestine laboratories seized by state, local and county departments, for 2001, was 768. These seizures doubled in one year (Fourth Judicial, 2002). Furthermore, the Office of National Drug Control Policy reported that as of February 2002, there were already 61 clandestine laboratories seized in Iowa (ONDCP, 2002b). These seizures reflect reported occurrences throughout the entire state, not just for the metropolitan areas. In addition, preliminary figures for 2001 reported by the Iowa Department of Public Health show that of the 42 methamphetamine-related hazardous substances emergency releases in the state, 18 occurred in the Southwest Iowa region (IDPH, 2002b).

Researchers for the Fourth Judicial District Research Initiative also examined data regarding admissions to drug treatment centers throughout the state and in the local area. By analyzing Substance Abuse Treatment Data (Admission/Screening Data) regularly collected by the State of Iowa, it was determined that there were 64,673 screen assessments and admissions for treatment⁷ (including duplicated screens and admissions) in the entire state of Iowa during 2001. Of these, 2,817 occurred in the Fourth Judicial District—comprised of nine southwestern Iowa coun-

ties listed in the table below (Fourth Judicial, 2002). While this data addresses only nine of the fifteen counties to be served by this grant, it demonstrates trends for the entire Southwest Iowa region.

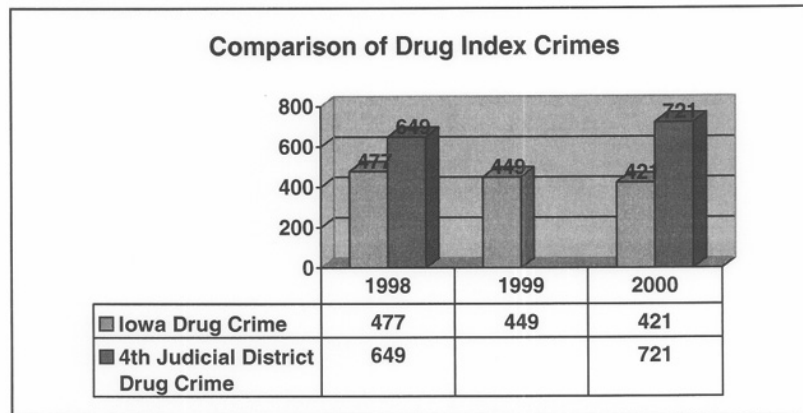
LOCAL TREATMENT ASSESSMENT AND ADMISSION DATA

Fourth judicial district county	2001 number of total screens/admits
Audobon County	93
Cass County	247
Pottawattamie County	1,568
Fremont County	59
Harrison County	164
Mills County	189
Montgomery County	214
Page County	340
Shelby County	163
Total	2,817

Source: Fourth Judicial District Research Initiative Examining Drug Prevalence in the Recent Arrestee Population.

From this data, it is clear that the southwestern portion of the State of Iowa has a higher than expected number of treatment admissions. Specifically, statewide data indicated an overall state average of 653.2 screen assessments and admissions per county for the entire year; however, the number evidenced in the Fourth Judicial District was 2.4 times greater (Fourth Judicial, 2002).

In this same research initiative, the counties of the Fourth Judicial District were examined in relation to the overall state to determine how Southwest Iowa's drug crime trends compare to the overall state. Illustrated in the following chart are the results of these analyses utilizing drug offense rates per 100,000 people (Fourth Judicial, 2002). (As all counties may not have regularly reported to the State of Iowa Incident Based Reporting System from where this data was originally derived, calculations were not possible for the Fourth Judicial District for 1999.)



Source: Fourth Judicial District Research Initiative Examining Drug Prevalence in the Recent Arrestee Population

Indicated by these statistics, drug crime trends in Southwest Iowa readily outnumber official drug rates when compared to the state.

Methamphetamine, otherwise known as "crank," poses such a huge threat because of its availability and the severe physiological effects associated with its use. The violence and environmental damage associated with the production, distribution, and use of the drug render it the third greatest drug threat. (NDIC, 2001.) This drug is a highly addictive central nervous system stimulant. Physiological effects include increased heart rate, elevated blood pressure, elevated body temperature, increased respiratory rate, and pupillary dilation, as reported by the U.S. Department of Health and Human Services (CSAT, 1999). Addiction, psychotic behavior, and brain damage (similar to that caused by Alzheimer's disease, stroke, and epilepsy)

are additional effects of methamphetamine use. Its extreme psychological and physical addiction, as well as its depletion of necessary chemicals in the brain, pushes the user into paranoia, physical degeneration and violence. The degenerative effects may be long lasting or even permanent. (ONDCP, 2002a.)

This synthetic drug can be a powerful stimulant. It jump-starts the central nervous system and causes increased activity and alertness in the user. It can give the user an illusion of great control and mastery over life. For many, the pleasure and power are so great they find themselves using despite the negative consequences to their body, mind and spirit.

Drug treatment providers are continually seeking more effective ways to treat methamphetamine use and addiction. According to the U.S. Department of Health and Human Services, research has not yet demonstrated the optimal duration, frequency, and format of treatment for stimulant addiction (CSAT, 1999).

A Needs Assessment in a fifteen targeted county area identified the lack of substance abuse treatment facilities as a concern. Currently, there are only fifteen residential beds to serve the entire Southwest Iowa area. There are no halfway house services, specializing in programming for methamphetamine users.

TOTAL DRUG OFFENSES BY COUNTY

County	1998	1999	2000
Audobon	3	2	1
Cass	79	59	44
Fremont	5	9	13
Harrison	58	59	71
Mills	8	43	79
Montgomery	82	80	74
Page	48	28	21
Pottawattamie	971	869	1174
Shelby	11	1

Source.—Fourth Judicial District Research Initiative Examining Drug Prevalence in the Recent Arrestee Population.

A PROMISING APPROACH TO THE CRISIS: THE HALFWAY HOUSE INITIATIVE

As one important initiative to address the methamphetamine epidemic, Heartland Family Service has proposed a Southwest Iowa Methamphetamine Treatment Program, also known as the Halfway House initiative, to assist healthcare agencies and the courts by providing services to women and children in methamphetamine abuse cases. Heartland is seeking funds to implement this initiative in fiscal year 2006.

This project will be a collaborative effort between Heartland Family Services, the Iowa Department of Human Services, the courts, and other social service agencies. It is a clinically managed low-intensity residential service for substance abuse patients, using Heartland Family Service's established residential treatment and counseling facilities.

The Halfway House program offers women an interim residential treatment service, and at the same time allows them to continue parenting their children. Treatment is directed toward applying recovery skills, preventing relapse, promoting personal responsibility and reintegrating the patient into work, education and family life. Services include individual, group and family therapy.

This level of care is a missing piece in the substance abuse treatment continuum of care in Southwest Iowa. Patients who complete residential programming ordinarily go directly home and receive outpatient treatment. To prevent relapse, many of these patients would benefit from a monitored interim treatment setting. Each patient has clinical oversight by a professional counselor who assesses the psychosocial history of a substance abuser to determine the most appropriate treatment plan.

Heartland Family Service sincerely appreciates the opportunity to present its views about the severity of the methamphetamine abuse problem.

PREPARED STATEMENT OF THE LEGAL ACTION CENTER

The Legal Action Center respectfully requests that this statement be entered into the official record for the Senate Appropriations Subcommittee on Labor, Health, and Human Services and Education and Related Agencies hearing on methamphetamine abuse, held on April 21, 2005. We appreciate the opportunity to submit testimony on this critical issue and its connection to fiscal year 2006 funding for alcohol

and drug addiction prevention, treatment, education, and research programs. The Legal Action Center is a non-profit law and policy organization that works to reduce alcohol and drug addiction and abuse and the harm it causes to millions of individuals and their families and friends by providing legal assistance to people in recovery or still suffering from addiction and programs that serve them to fight discrimination and violations of privacy, and conducting public policy advocacy and research to expand prevention, treatment and research and to promote other sound policies.

METHAMPHETAMINE ABUSE AND ADDICTION

According to the 2003 Substance Abuse and Mental Health Services Administration (SAMHSA) National Survey on Drug Use and Health (NSDUH) the incidence of methamphetamine use rose between 1992 and 1998 but since then there have been no statistically significant changes. However the NSDUH also indicates that approximately 12 million Americans have tried methamphetamine, with the majority of past-year users between 18 and 34 years of age. Additionally, women make up 47 percent of all treatment admissions for methamphetamine, which is a much greater percentage than admissions associated with most other drugs. According to the National Institute on Drug Abuse (NIDA), methamphetamine abuse and production continue at high levels in Hawaii, west coast areas, and some southwestern areas of the United States and unfortunately is continuing to spread eastward to urban, suburban, and rural areas at a pace unrivaled by any other drug in recent times.

Just as addiction to alcohol and other drugs is treatable, addiction to methamphetamine is treatable as well. Despite contrary media accounts and common misconceptions, methamphetamine is not a “new” drug and individuals who are addicted to methamphetamine have been successfully treated for years. Research from SAMHSA’s Center for Substance Abuse Treatment indicates the following results:

- Methamphetamine use decreased 69 percent after treatment.
- Employment of methamphetamine users increased 60 percent after treatment.
- Housing status increased about 24 percent.
- Arrests decreased about 38 percent.
- The number of clients reporting good or excellent health increased about 30 percent after treatment.

Results from the 2003 Iowa Adult Methamphetamine Treatment Project also found the following:

- 71.2 percent of the clients using “meth” remained abstinent 6 months after treatment and 75.4 percent of clients were abstinent one year after treatment.
- 90.4 percent of the clients had not been arrested 6 months after treatment and 95.7 percent of those interviewed one year after treatment had not been arrested during the previous 6 months.
- 54.8 percent of the clients were working full time 6 months after treatment while 66.7 percent were working full time one year after treatment.

Recent efforts by SAMHSA have increased access to treatment for methamphetamine addiction and, if properly funded, will continue to do so. These efforts include:

- Providing Substance Abuse Prevention and Treatment Block Grant (SAPTBG) funds, which a number of Western states are using to address methamphetamine addiction.
- Awarding \$14 million over 3 years to fight methamphetamine-inhalant abuse in 10 ten states, including Ohio, Iowa, Pennsylvania, New Mexico, Texas, Hawaii, and Nevada; in addition, in fiscal year 2004, the Center for Substance Abuse Treatment (CSAT) awarded \$2.9 million in funds to 6 grantees to support programs focused on methamphetamine. Three earmarked awards totaling \$1 million have been made to Iowa and Hawaii for methamphetamine-specific programs.
- Implementing the Strategic Prevention Framework (SPF) through the Center for Substance Abuse Prevention (CSAP) for States to identify geographic, demographic, and specific substance abuse areas of greatest need.
- Allowing States to focus on methamphetamine addiction through the Access to Recovery (ATR) Program. Tennessee and Wyoming have both focused their ATR funds on methamphetamine abuse and addiction. Tennessee has a special focus on persons abusing or addicted to methamphetamine in rural or Appalachia areas, reaching out to community and faith-based organizations. Wyoming is focusing on Natrona County, the county with the second highest treatment need in the state and the “epicenter of the current methamphetamine epidemic.”

Continued federal funding for these initiatives will help ensure that individuals who are addicted are able to access treatment for their illness. Additionally, it will

aid the Administration's steady progress toward reaching its goal of lowering the rate of drug use by 25 percent among youth and adults over five years.

CLOSING THE TREATMENT AND PREVENTION SERVICES GAP

According to the Substance Abuse and Mental Health Services Administration (SAMHSA) National Survey on Drug Use and Health (NSDUH), in 2003 approximately 22.2 million people age 12 or over needed treatment for an alcohol or illicit drug problem. However the 2003 NSDUH also estimated that only 1.9 million of these individuals in need of treatment actually received specialty treatment, leaving 20.3 million persons with either an alcohol or illicit drug problem needing but not receiving treatment. Additionally, youth around the nation are widely exposed to drug and alcohol use and may not receive access to comprehensive prevention services. Although we are encouraged by findings in the 2004 Monitoring the Future study that youth illicit drug use is gradually declining, we must continue to invest in the best treatment and prevention options and provide services that are evidence-based, ensuring that our wealth of science becomes incorporated into everyday practice.

FIELD RECOMMENDATIONS FOR SUBSTANCE ABUSE PREVENTION, TREATMENT, EDUCATION AND RESEARCH FUNDING FOR FISCAL YEAR 2006

Our organization, in partnership with other advocates, urges Congress to adopt the following funding levels in fiscal year 2006 for alcohol and drug treatment, prevention, education, and research programs in the Substance Abuse and Mental Health Services Administration (SAMHSA), the Department of Education, and the National Institutes of Health. These investments will provide desperately needed services in communities across the country:

- \$1.847 billion for the Substance Abuse Prevention and Treatment Block Grant, the foundation of the publicly supported prevention and treatment system in this country.
- \$472 million for the Center for Substance Abuse Treatment (CSAT), including \$150 million for the Access to Recovery drug treatment voucher program.
- \$210 million for the Center for Substance Abuse Prevention (CSAP).
- \$441 million to continue full funding for the Safe and Drug Free Schools and Communities State Grants program.
- \$464 million for research at the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and \$1.0671 billion for research at the National Institute on Drug Abuse (NIDA).

FEDERAL FUNDING IS ESSENTIAL TO THE PREVENTION AND TREATMENT OF SUBSTANCE ABUSE AND ADDICTION

Programs that serve people with alcohol and drug addiction depend nearly exclusively on public funds. According to SAMHSA's National Expenditure Report released in March, public funding provides the vast majority of substance abuse expenditures, increasing from 62 percent in 1991 to 76 percent in 2001. Private insurance represented only 13 percent of addiction treatment expenditures in 2001, while it covered 36 percent of all health care expenditures. Between 1991 and 2001 private insurance payments for addiction treatment declined by an average of 1.1 percent annually. Without strong federal commitment to closing the treatment gap, educating young people about the importance of refraining from using illicit drugs and alcohol, and making further advances on the science of addiction, substance abuse will continue to be one of the nation's top health problems, causing more deaths, illnesses, and disabilities than most other preventable health conditions.

Although the alcohol and drug addiction treatment system relies heavily on public funds, an extremely small percentage of health care spending is used for treatment. In 2001, of the \$1.4 trillion spent on health care, an estimated \$18 billion was devoted to treatment of alcohol and drug addiction. This amount constituted just 1.3 percent of all health care spending and a fraction of the economic and social costs of substance abuse: in 1998, the total economic costs of alcohol abuse were estimated to be \$185 billion and the total economic costs of drug abuse were \$143 billion, a total of \$328 billion. These costs include medical consequences, lost earnings linked to premature death, lost productivity, motor vehicle crashes, crime, and other social consequences. Funding for addiction treatment is not even keeping pace with inflation. Expenditures on drug and alcohol treatment grew 1.7 percentage points less than the growth rate of all health care.

IMPORTANCE OF FUNDING THE FULL CONTINUUM OF PREVENTION, TREATMENT, AND RESEARCH

The Legal Action Center urges Congress to help improve access to, and the effectiveness of, services by increasing support for the following programs:

—*\$1.847 billion for the Substance Abuse Prevention and Treatment Block Grant.*—

The Substance Abuse Prevention and Treatment (SAPT) Block Grant is the cornerstone of the nation's prevention and treatment system, providing approximately half of all public funding for treatment services, including methamphetamine treatment. In 2002, the SAPT Block Grant served 1.9 million people; over 10,500 community-based organizations receive Block Grant funding from the states. The Block Grant also provides crucial support for the states' prevention programs, designating 20 percent of the total funding for this purpose. To help meet the pressing need for treatment and prevention services and to provide resources to improve their effectiveness, we urge Congress in fiscal year 2006 to fund the SAPT Block Grant at \$1.847 billion, a \$71 million increase.

—*\$472 million for the Center for Substance Abuse Treatment (CSAT), including \$150 million for the Access to Recovery drug treatment voucher program.*—Sustaining and increasing funding for CSAT programming is essential to close the treatment gap. Funding for the Best Practices portfolio within CSAT, which supports effective treatment through the adoption of evidence-based practice, is critical in order to ensure that what is learned about addiction through scientific research is effectively shared with the treatment provider community. CSAT supports this technology transfer through its Addiction Technology Transfer Centers (ATTCs), which are located regionally throughout the nation and provide training and technical assistance to providers. In addition, funding for CSAT's Targeted Capacity Expansion programs that address specific and emerging drug epidemics, including methamphetamine and/or underserved populations, such as youth, pregnant and parenting women, and communities of color must be strengthened. These CSAT funds enable states and regions dealing with emerging needs, such as methamphetamine addiction or veterans returning home in need of essential treatment services, to appropriately address these needs. Ensuring that these programs continue to receive support is critical, since many of these programs locally do not receive traditional Block Grant funding.

We support the innovative approaches that SAMHSA has developed to expand the continuum of services offered and the range and capacity of providers. For example, the Screening, Brief Intervention, and Referral to Treatment (SBIRT) program helps to link primary care and emergency services providers with treatment programs in order to target individuals, particularly youth, whose abuse of alcohol and drugs is incipient. The new Access to Recovery (ATR) program holds the promise of expanding treatment capacity, providing aftercare and recovery support services that are critical to the effectiveness of treatment, and promoting the measurement of outcomes that help to improve program effectiveness. We support the President's request to increase funding for the ATR program at CSAT by \$50 million, funding the program at \$150 million. Additional funding for the Access to Recovery program would allow seven additional grants to be funded. Like all new programs that are a departure from previous approaches, it will take time for states to fully implement the ATR program, and we urge patience in these first two or three years of implementation.

—*\$210 million for the Center for Substance Abuse Prevention (CSAP).*—Addiction is a disease that begins in adolescence; research by the National Institute on Drug Abuse (NIDA) has shown that if we can stop use and abuse before age 25, we will significantly reduce the prevalence of addiction. Prevention efforts are effective in deterring young people from using illicit drugs and alcohol. We strongly support CSAP's Strategic Prevention Framework to promote the use of performance measurement by providers, expand collaboration across community agencies, and support implementation of effective prevention programs at the State and community levels. CSAP's Strategic Prevention Framework will help communities to promote youth development, reduce risk-taking behaviors, build assets and resilience, and prevent problem behaviors across the life span.

—*\$441 million to continue full funding for the Safe and Drug Free Schools and Communities State Grants program.*—The federal Safe and Drug Free Schools and Communities Act Program is the backbone of school-based prevention efforts in the United States, and it is having a significant impact in many states. We strongly urge the Subcommittee to support this program and to maintain current funding for the State Grants. The SDFSC program has had a significant

impact on helping to achieve the 17 percent overall decline in youth drug use over the past three years, documented by the 2004 Monitoring the Future survey. According to recent data, upwards of 37 million youth are served annually by programs funded through SDFSC. Cutting the SDFSC program will leave millions of American children without any drug education.

—\$464 million for research at the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and \$1.0671 billion at the National Institute on Drug Abuse (NIDA).—Research into the causes, costs, treatment, and prevention of alcoholism and drug addiction plays an important role in improving the quality of services. Both agencies are taking steps to promote the transfer of new research to practice, including collaboration with SAMHSA, state agencies and providers.

Over the past several years, NIDA has made extraordinary scientific advances in understanding the nature of addiction, such as those made through the use of imaging technologies like positron emission tomography (PET scans), and through the development of new treatment technologies and medications, such as buprenorphine used to treat opiate addiction. Research on addiction as a brain disease has been useful in the development and testing of new science-based therapies. In regards to methamphetamine NIDA has launched a number of initiatives to support a comprehensive research portfolio on the drug and its effects. NIDA's efforts to understand the science behind meth and its effects has lead to the launching of a methamphetamine medications development initiative as well as the establishment of the Methamphetamine Clinical Trials Group (MCTG) both of which will further the development of medications that are effective for treatment.

NIAAA also has conducted breakthrough research that has improved clinical practice, with much of this research focusing on the genetics, neurobiology, and environmental factors that underlie alcohol addiction. NIAAA also has sought to use new information about alcohol use to promote education and an effective public health response to this problem.

CONCLUSION

Methamphetamine abuse can be prevented and treatment for methamphetamine addiction does work. Increased federal support is essential to preventing alcohol and drug abuse and treating addiction. We appreciate the Subcommittee's focus on the critical issue of methamphetamine abuse. Thank you for your leadership.

PREPARED STATEMENT OF THE THERAPEUTIC COMMUNITIES OF AMERICA

Therapeutic Communities of America respectfully requests that this written statement become part of the official record for the appropriations hearing before the Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education on April 21, 2005 on Methamphetamine Abuse. TCA commends the Chairman and the Committee for their continued leadership to hold a hearing on this important issue.

METHAMPHETAMINE AND THERAPEUTIC COMMUNITIES

Therapeutic Communities of America (TCA) founded in 1975 as a non-profit membership association, represents over 500 community-based programs across the country dedicated to serving those with substance abuse and co-occurring problems. Members of TCA are predominately publicly funded through numerous federal, State, and local programs across multiple agency jurisdictions.

The "2002 National Survey on Drug Abuse and Health" Report stated that only 18.2 percent of all Americans over the age of 12 needing treatment actually received it. The use of Methamphetamine is becoming an epidemic in some areas of the United States and we need to help communities put in place evidence-based treatment services to fight this growing problem.

Therapeutic communities have been successful in helping many addicted individuals, often thought to be beyond recovery, secure a way out of self-destructive behavior. There is a myth that methamphetamine cannot be treated with success. Methamphetamine can and is being treated. Historically, TCs have been extremely effective at adapting their programs to provide effective care as drug use trends change. While TCA strongly commends Congress' focus on methamphetamine abuse, we believe that such efforts could be strengthened with a greater emphasis on treatment. It is critical that methamphetamine legislation include provisions providing for treatment funds. These funds are especially crucial because of the nature of the

methamphetamine epidemic—the drug is mostly present in rural communities, where evidenced-based treatment services tend to be scarce or limited.

All legislation on methamphetamine needs to include the call for research, treatment demonstration grants, and overall funding and support for treatment as part of the solution to end the grip of methamphetamine. While we are confident that existing modified treatment methods can have great success when applied to methamphetamine, further research on treatment for this drug can only improve success rates.

Much of the limited research on methamphetamines comes from the application of cocaine research. TCs in their experience of treating special populations: adolescents, criminal justice clients, gang involved, elderly, co-occurring clients with severe mental illness, veterans, and women and infants have learned that both timing and approaches need to be modified to work with these individuals within the therapeutic community. TCs are welcoming methamphetamine users into their centers, but currently most TCs are urban-based and not in rural communities.

The therapeutic community (TC) methodology of treatment addresses the entirety of social, psychological, cognitive, and behavioral factors in combating alcohol and drug abuse. Traditionally, therapeutic communities have been community based long-term residential substance abuse treatment programs. In recent years, TCA members have expanded their range of services, providing such services as assessment, detoxification, residential care, in-prison programs, case management, outpatient, transitional housing, family therapy, pharmacologic therapies, education, vocational and employment services, primary medical services, psychological services, and continuing care. Most clients within a TC have cycled through our criminal justice and human service systems numerous times before getting to TCs, yet through modified programs based on evidence-based research we have able to demonstrate successes even with the most difficult of populations served. Many of these clients are mandated to treatment. The success rates of TCs with clients that are both mandated and not mandated demonstrate that substance abuse treatment does not have to be voluntary to be effective. Therapeutic communities support clients to develop individual change and positive growth and support the addicted individual with his/her spiritual, behavioral, psychological, social, vocational, and medical well-being. TCs have long been successful in effectively coordinating with other community organizations as part of their comprehensive approach to service.

TCA suggests six treatment principles as guidelines for addiction public policy and funding:¹

- No single treatment is appropriate for all individuals.
- Effective treatment attends to multiple needs of the individual, not just his or her drug use.
- Remaining in treatment for an adequate period of time is critical for treatment effectiveness.
- Substance abuse treatment does not need to be voluntary to be effective.
- Recovery from substance abuse can be a long process and frequently requires multiple episodes of treatment.
- Treatment of addiction is as successful as treatment of other chronic diseases such as diabetes, hypertension and asthma.

In our experience, TCA recommends that public policy secure four additional public policy principles:

- Substance abuse treatment programs should be constructed on evidence based methodologies that are outcome based and meet performance measures.
- A skilled service provider with specific training in addiction should do assessment and referral of an individual for addiction treatment.
- Substance abuse treatment is cost-effective in reducing drug abuse and its associated health, economic and social costs.
- Substance abuse treatment programs and their staffs should meet recognized certification, accreditation and/or licensing standards.

FEDERAL AGENCY ACTIVITIES

The Substance Abuse and Mental Health Services Administration (SAMHSA), an agency of the U.S. Department of Health and Human Services (HHS), was established by an act of Congress in 1992 under Public Law 102–321. Through grant, educational, and communication efforts, SAMHSA seeks to fulfill its mission to “focus attention, programs, and funding on improving the lives of people with or at

¹These principles are based in part on Principles of Drug Addiction Treatment—A Research-Based Guide, National Institute on Drug Abuse, National Institutes of Health, NIH Publication No. 004180.

risk for mental and substance abuse disorders.” SAMHSA organizes its efforts around a matrix that includes much of what therapeutic communities support as necessary to achieve successful service delivery and positive outcomes for addiction recovery.

The Substance Abuse Prevention and Treatment Block Grant (SAPT) is the single largest funding stream for treatment programs for providing addicted individuals with treatment. TCA commends Congress for increasing SAMHSA funding over the years. The CSAT Programs of Regional and National Significance is SAMHSA’s discretionary grant program. These funds have been effective in developing and improving treatment for special populations and in targeting emerging national and regional needs. TCA commends SAMHSA for offering incentives and flexibility to the States to improve service systems and secure positive outcomes. Providers that are TCA members have worked successfully with the States in designing programs at the state and local levels and will continue to actively work with States to provide quality services.

The National Institute on Drug Abuse (NIDA), National Institute of Health provides invaluable clinical evidence to drug prevention and treatment communities, improving efforts to combat the consequences of drug abuse. Research conducted by NIDA has improved addiction services and allowed federal funds to be used to support effective treatment. NIDA was established in 1974, and became part of the National Institutes of Health, Department of Health and Human Services in 1992. NIDA seeks through its mission “to lead the Nation in bringing the power of science to bear on drug abuse and addiction”. TCA appreciates Congress’ actions in doubling the NIH budget over the last several years.

Therapeutic communities have been successful in translating science to services, which has allowed us to modify our programs to improve outcomes. The SAMHSA Treatment Improvement Protocol 33: Treatment for Stimulant Use Disorders is an example of materials that have been developed to assist providers on the approaches and application of treatment to the methamphetamine user. The use of contingency management, engagement strategies, counseling, medical services, relapse prevention, family therapy, housing, and vocational services are listed as part of the approach to treating methamphetamine users.

TCA recommends the following policy recommendations.

THE EXPANSION OF EVIDENCE-BASED TREATMENT ESPECIALLY TO RURAL AREAS

Although rural areas may have some treatment available, the need for comprehensive services is important in treating the methamphetamine user. One barrier to expanding treatment is the need for a substance abuse workforce. There is an inadequate supply of workers trained in substance abuse treatment, including those specializing in the therapeutic community philosophy of treatment. The substance abuse treatment community experiences both high turnover and a low rate of newly trained workers entering the field. Retention problems lead to overworked staff and difficulty in training. Low pay, a high stress work environment and burdensome regulations restricting time spent on direct patient care plague the substance abuse field. TCA believes the substance abuse treatment community would benefit from an array of incentive programs to recruit and retain counselors and other staff trained specifically in alcohol and drug abuse. In rural areas—the very same places most affected by the spread of methamphetamine—this problem is especially acute. Public health programs that provide incentives for other health professions to settle in rural areas need to include substance abuse counselors. Career ladders should be supported for individuals in recovery who want to become certified and qualified counselors.

CONSTRUCTIVE COORDINATION WITH THE CRIMINAL JUSTICE SYSTEM

The collaboration between the criminal justice system and TCs has been shown to be effective in cutting recidivism through substance abuse recovery. NIDA research has helped identify components necessary for positive treatment outcomes. Although the criminal justice system and the treatment system have different societal responsibilities, both can work effectively to coordinate their missions and respect their expertise. Harry Wexler Ph.D., Senior Principal Investigator, National Development and Research Institutes, Inc. stated at a TCA meeting that research findings and clinical observations have demonstrated the successful adaptation of the TC model to treating the addicted offender with these necessary indicators:

- A treatment approach based on a clear and consistent treatment philosophy.
- The establishment of an atmosphere of empathy and physical safety.
- The recruitment and retention of qualified and committed treatment staff.
- The specification of clear and unambiguous rules of conduct.

The employment of the ex-offenders and ex-addicts as role models, staff and volunteers.

The use of peer role models and peer pressure.

The maintenance of the treatment program's integrity, autonomy, flexibility, and openness.

The isolation of residential program from the rest of the prison population to diminish the highly negative influence of untreated inmates.

The literature shows that 9 to 12 months is the minimum duration needed to produce reductions in recidivism.

The establishment of continuity of care from treatment to community aftercare including empathy and physical safety.

This NIDA funded research is important, as it shows the need for continuing care for the offender when he returns to his community, the importance of mentoring and self-help, and the importance of long-term treatment for offenders. Improving the Department of Justice Residential Substance Abuse Treatment for State Prisoners Grant Program (RSAT) and requiring aftercare will strengthen the program and make it achieve better and more successful outcomes. The California Amity Program NIDA study showed that for a 3-year return to custody rate that re-entering offenders with no treatment had a 75 percent return rate, but with in-prison treatment and aftercare the return rate dropped to 27 percent.² The President's budget increased funds to the RSAT program in the fiscal year 2006 request but does not require aftercare. It is the SAMHSA Block Grant that continues to be the safety net for aftercare treatment.

ELIMINATION OF THE MEDICAID INSTITUTIONS OF MENTAL DISEASE (IMD) EXCLUSION

Until the IMD exclusion for community residential addiction treatment is eliminated, many communities will be dependent on CSAT funding to serve special populations and to target emerging issues within their communities. SAMHSA has done an excellent job developing and expanding services to special populations and should have the continued capacity to help communities' meet specific targeted needs and to provide cost-effective and appropriate care. These efforts should be sustained by our health care system for low-income Americans the same as it is for any other chronic illness. Because of the Institutions for Mental Disease (IMD) Medicaid exclusion, community residential addiction treatment is not covered by Medicaid for programs over 16 beds. The IMD Medicaid exclusion is a significant barrier to many who seek appropriate and effective substance abuse treatment, including pregnant women. Those with substance use disorders must have the full range of treatment options available to them. The exclusion limits the ability of Medicaid eligible Americans to receive cost-effective and appropriate care, or any care at all, for their addiction. With the Methamphetamine epidemic we need to secure access for Medicaid eligible drug-abusing Americans for appropriate substance abuse treatment. This includes eliminating the IMD Exclusion for substance abuse community residential treatment. It is our belief that the IMD exclusion was not intended by Congress to include community-based therapeutic communities or substance abuse residential treatment as it has been interpreted by the State Medicaid Guidelines within the Department of Health and Human Services. As part of the review of options to treat the Methamphetamine user, all Medicaid eligible Americans should have access to appropriate substance abuse treatment.

SUBSTANCE ABUSE AND CO-OCCURRING PREVENTION AND TREATMENT FOR OUR RETURNING TROOPS

In addressing the Methamphetamine problem in our communities we should also recognize the potential for drug use by all sectors of the population, including our returning veterans who may have PTSD or depression. With our military returning from Iraq, TCA hopes to assist veterans with addiction and co-occurring disease by preparing and identifying the appropriate early interventions, actions and services needed by veterans to make their re-entry successful. TCA supports public policy that gives veterans access to systems that would provide them and their families with substance abuse assessment and treatment. TCA firmly believes that returning veterans should not be lost between agencies or—worst yet—be left untreated because they fall through the cracks. SAMHSA and NIDA have great potential to contribute leadership and work with the Veterans Administration as communities prepare support services, particularly to our returning reservists and our National Guardsmen. SAMHSA and NIDA efforts to find common outcomes for the criminal

² Institute of Behavioral Research, Texas Christian University, Research Summary from Prison Journal, 1999, Wexler, Melnick, Lowe, & Peters.

justice system and substance abuse treatment system have demonstrated their ability to work with other departments like the Department of Justice to build bridges that foster positive societal outcomes. Promoting public policy and funding that supports client based treatment for veterans and their families based on evidence-based research will be an emerging and significant need in the coming years. This at-risk population needs both prevention and treatment programs readily available in their communities so that throughout the United States and especially in methamphetamine hubs that we constructively prevent, treat, and safeguard our veterans at re-entry.

PUBLIC EDUCATION FOR EARLIER INTERVENTION FOR TREATMENT

People recover from drug abuse and are productive citizens and family members. Often a family is in uproar and they do not recognize that the uproar may be a family member on drugs. Public education and community prevention efforts that help families and employers recognize the need for treatment and identifies where to get help should be part of any public policy treatment approach. Often one does not see a problem until they see a solution. That comes with having appropriate treatment available. Your leadership opens the door for families to see a solution.

TCA recommends appropriations as listed on the attached chart. Thank you.

ATTACHMENT 1

	Fiscal year			
	2004 final Includes across the board cut (0.59 percent)	2005 final Includes across the board cut (0.8 percent)	2006 administration request	2006 TCA request
HHS—SAMHSA Center for Substance Abuse Treatment—CSAT				
SAPT Block Grant	\$1.779b (+ 25.2m)	\$1.776b (− 3.5m)	\$1.776b (+ 0.0m)	\$1.847b (+ 71.0m)
Programs of Regional and National Significance— PRNS (Targeted Capacity Grants & Access to Re- covery)	419.2m (+ 102m)	422.4m (+ 3.1m)	447.1m (+ 24.7m)	472.1m (+ 49.7m)
HHS—SAMHSA—Center for Substance Abuse Prevention—CSAP				
Programs of Regional and National Significance- PRNS	198.5m (+ 1.4m)	199m (+ 0.2m)	184.3m (− \$14.4m)	210m (+ 11.0m)
HHS—National Institute on Health—NIH				
National Institute on Drug Abuse—NIDA	991.5m (+ 29.8m)	1.007b (+ 15.2m)	1.010b (+ 4.0m)	1.067b (+ 60.4m)
National Institute on Alcohol Abuse and Alcoholism— NIAAA	428.9m (+ 12.8m)	438.5m (+ 9.6m)	440.0m (+ 2.0m)	464.8m (+ 26.3m)
Dept. of Ed.				
SDFSC—State grants	437m	441m	(− \$441m)	441m (level)

CONCLUSION OF HEARING

Senator HARKIN. Thank you all very much for being here. That concludes our hearing.

[Whereupon, at 11:46 a.m., Thursday, April 21, the hearing was concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]